New Orleans Medical
and
Surgical Journal

Vol. 96 MARCH, 1944 No. 9

MATERNAL AND CHILD WELFARE IN NEW ORLEANS

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NEW ORLEANS

The value of an adequate program of maternal and infant welfare is now generally recognized. Adequate care begins ideally with early and constant prenatal care and is followed, in a broad, continuous program of maternal and infant welfare, by intrapartum, postpartum, puerperal and pediatric care. All of these services are essential to a complete program, all are of equal importance and all should receive equal stress. It is true, for instance, that the most careful supervision during pregnancy cannot compensate for inadequate attention or poor judgment during parturition and the puerperium, but it is equally true that the most skillful delivery cannot compensate for inadequate prenatal care. And furthermore, the most competent obstetric care loses much of its value if infant mortality is high and babies are doomed to die through lack of pediatric care during the first years of life.

The many benefits accruing to mother and baby from continuous care and supervision are so obvious on even cursory examination of mortality and morbidity statistics that other valuable results frequently are overlooked. Yet they are of prime importance in modern medicine. For example, periodic health examinations may be initiated at this time, continuing throughout life, employing all measures available for prevention, early detection and treatment of disease. Improved family health would be a direct result; community health would benefit indirectly. Finally, an adequate program in New Orleans would offer unexcelled facilities for teaching purposes not only in obstetrics and pediatrics but in the fields of public health as well. Recognition of New Orleans as an outstanding medical center derives in great part from efforts and activities devoted to medical education; we could ill afford persistently to ignore improved and advanced teaching methods in the instruction and training of physicians, medical students and nurses. Present-day teaching in obstetrics entails more than a course of didactic lectures and some practical instruction in the labor and delivery rooms. For really effective instruction all phases of maternal welfare must be considered, not only by means of theoretical discussion, but, of much greater importance, through demonstrations and observations on the clinical service. Students, interns and residents are not impressed by outlines on the management of syphilis complicated by pregnancy, for instance, if they learn that no facilities exist locally for the treatment of antepartum syphilis or for the follow-up on babies having congenital syphilis. Neither are they impressed with the value of postpartum care if patients are sent home shortly following delivery without the routine care so strongly advocated in lecture. In modern medical training instruction by example, by deed rather than

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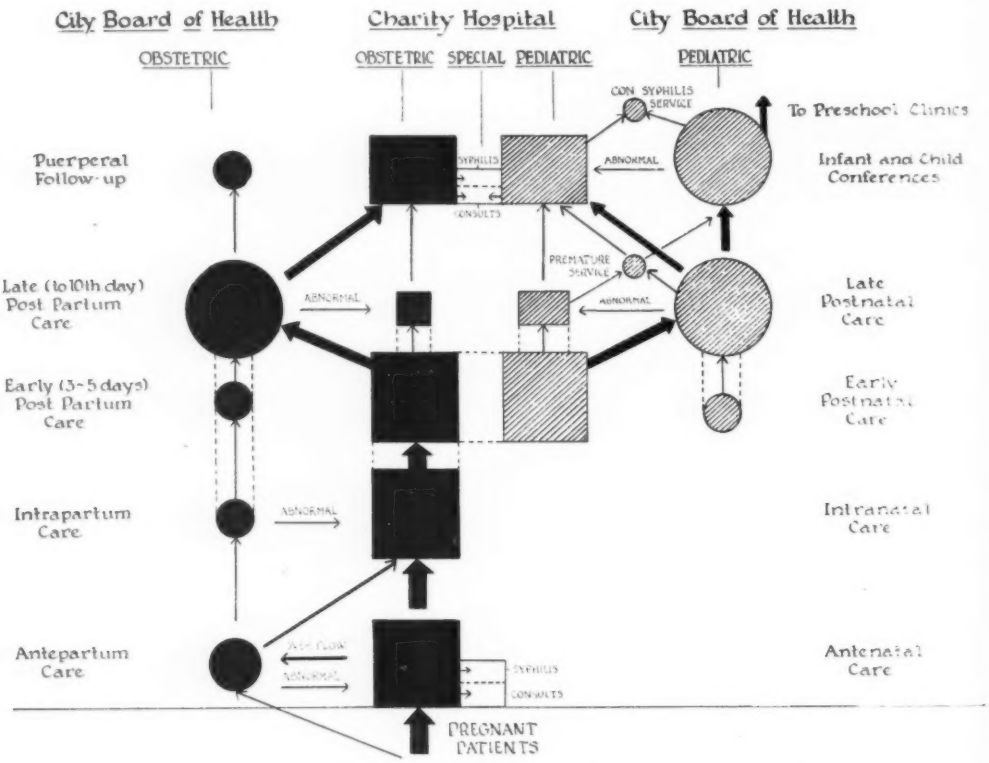
by word alone, is mandatory. Observation of the ultimate as well as the immediate results of treatment is essential not only for accurate evaluation of therapeutic endeavors but for effective teaching.

Although the requisites of an adequate program are well known, the means for practical application frequently are lacking and the system remains a theory rather than a fact. Because an extensive and impartial investigation disclosed that this was apparently true to some extent in the New Orleans area, the recently organized Bureau of Maternal and Child Health of the New Orleans Health Department proposed, in September, 1941, that an attempt should be made to integrate the various components active in maternal and infant care, and to augment the existing facilities or furnish new services when indicated. For accomplishing these ends a specialized medical and nursing personnel was made available, together with clinic space and equipment. Agencies subscribing to a policy of collaboration and cooperation with the Bureau included the Charity Hospital, the departments of obstetrics and pediatrics of Louisiana State University and Tulane University and the Child Welfare Association. The three services at Charity Hospital, Tulane, Independent and L. S. U., supply the great majority of patients, referring both white and colored mothers and babies to the City Board of Health for supervision and follow-up. Such close integration of activities not only facilitates the program for adequate obstetric and pediatric care but obviates the overlapping and duplication of services that otherwise would be unavoidable. All unnecessary work and expense are eliminated, a most important feature in tax-supported medical service.



Integration of Maternal and Child Welfare Activities in New Orleans.

The objectives of the program as organized in New Orleans are:

1. To lower maternal and infant mortality and morbidity by giving continuous care, instructions and supervision throughout the maternity cycle to mothers who are unable to pay for the services of a private physician.

2. To furnish continuous pediatric care for infants by means of well-baby conferences.

3. To relieve the serious congestion in the obstetric and pediatric clinics and wards of the Charity Hospital.

4. To initiate and stimulate interest in obstetric and pediatric follow-up examinations and to furnish an organization for this work.

5. To assist in an effective educational program for patients and for the medical and nursing professions.

6. To assist in developing a cooperative program with all of the public health agencies in the community.

7. To provide satisfactory service at low cost.

ORGANIZATION AND ACTIVITIES

The Bureau of Maternal and Child Health is organized under the supervision of a director, aided by consultants for the specialties of obstetrics, pediatrics and syphilology. The medical staff consists of 15 part-time physicians, eleven pediatricians and four obstetricians, compensated on an hourly basis. The nursing staff includes a director, an obstetric and a pediatric instructor, seven supervisors, six obstetric nurses and 60 to 70 field nurses available for general service.

Up to the present time the Bureau has accepted responsibility for the organization, establishment, supervision and maintenance of five types of clinical service with activities which may be summarized briefly:

The *Obstetric Clinic Service* offers medical and nursing supervision for adequate antepartum and postpartum care in six decentralized clinics. These clinics are located in districts, such as Algiers, which are rather inaccessible to Charity Hospital, and are convenient for patients who otherwise would be forced to travel long distances in order to attend the critically over-crowded hospital clinics. Separate teaching clinics are maintained for the care of patients scheduled for delivery on the Tulane and L. S. U. Home Delivery Services. Clinics are also maintained for white patients in a strictly limited income group, who desire complete care including home delivery for a small fee because they cannot afford private facilities and are ineligible for or will not accept charity.

As special features, in addition to routine care, chest x-ray is mandatory, and each mother attends a course of instruction in personal hygiene and infant care.

Twenty-two clinic sessions are scheduled each month, the average census totals 360.

The *Home Delivery Service* furnishes nursing care throughout the intrapartum and postpartum periods to patients who desire to be delivered at home. These facilities are available for the use of private physicians as well as for the medical schools. Medical care is provided for the white patients in the low income group. The home deliveries average 40 per month.

The *Postpartum Nursing Service* provides postpartum and postnatal nursing care and supervision in the home for normal patients who deliver at Charity Hospital but are permitted to return home prior to the sixth day postpartum. Normal patients are discharged from the hospital and referred to the service on the third day after spontaneous delivery and on the fifth day after episiotomy and forceps. The postpartum hospitalization period is thus reduced by at least five days. Experience with more than 6000 patients has demonstrated no ill effects either immediate or remote; in fact, these patients seem to enjoy a more natural puerperium. This is a unique service which deserves further investigation because it affords a solution for the overcrowded maternity wards, a problem now confronting practically all hospital authorities. By referring more than 3000 patients yearly Charity Hospital releases 30,000 beds and bassinets, an economy of perhaps $75,000.00.

Nursing service in the home following hospital delivery also is available for a limited number of abnormal patients who might need special nursing attention under the direction of the hospital physician.

The *Pediatric Clinic Service* offers complete medical and nursing supervision for babies born at Charity Hospital or in the home. It should be emphasized that well babies only are accepted and that the service is concerned primarily with problems of nutrition, growth and development, immunization and special tests. An organization is provided to cooperate with the pediatric services at Charity Hospital in the management of premature infants. The Bureau maintains 86 clinics, in 16 locations, with a monthly attendance of more than 2500.

The *Syphilis Service* offers all facilities for the detection and treatment of maternal and congenital syphilis. Of particular interest is the family contact and follow-up work. Each month therapy is administered to approximately 100 mothers and 30 babies and supervision given to approximately 50 babies in the potential congenital syphilis group.

The Bureau was fortunate indeed in securing excellent housing facilities for clinics in districts which are heavily populated with the low-income families most needful of proper medical care. Every effort was made to establish clinics in localities far removed from existing facilities, thereby providing decentralized service. Sixteen clinic stations have been established; five are located, expense free, in Federal housing projects.

The Bureau has been fortunate too in the cooperation and aid afforded by the various individuals and institutions concerned with the problems of maternal and child health in New Orleans. Without the cordial and concerted agreement and participation of Charity Hospital, the medical departments of Louisiana State University and Tulane University, the Child Welfare Association and other groups and agencies, the policies could not have been formulated nor the joint program activated. All plans were approved by representatives of organized medicine.

SUMMARY AND CONCLUSIONS

1. Minimum requisites for an adequate program of maternal and child welfare include constant care and supervision of the mother during pregnancy, parturition and the puerperium, and of the baby during infancy and childhood.

2. Benefits resulting from a broad continuous program can be measured not only in improved health but in more effective medical instruction through demonstration and example.

3. Activities of the Bureau of Maternal and Child Health of the New Orleans Health Department are described, objectives are outlined and census data presented. All activities are coordinated to operate in a program of close collaboration with Charity Hospital, the Tulane and Louisiana State University Medical Schools and the medical profession.

4. Indications for continuing the program are evidenced by the gratifying results achieved in the relatively short period of time it has been in operation.

THE INDUSTRIAL HYGIENE PROGRAM TODAY*

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In the first of this series of lectures, we have seen that the problem of industrial hygiene is three-fold: it embraces all the potential hazards and dangers that the worker encounters on the job; it involves the character of the labor force itself; it includes all factors of the worker's home or community environment which help or hinder him on the job.

We have seen that war has doubled and trebled our industrial need and our industrial speed. We have seen that the workers

*Presented before the Seventh Annual Meeting, The New Orleans Graduate Medical Assembly, March 15-18, 1943, New Orleans.

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are not only brought face to face with tremendous physical and chemical forces, but their living and working conditions are vastly changed.

How, then, are these industrial health problems being met in wartime America? The war program of industrial hygiene was outlined early in 1941 and approved by the Health and Medical Committee of the Office of Defense Health and Welfare Services. The three major objectives of the program are: (1) to continue and expand essential research; (2) to extend the application of industrial hygiene knowledge through assistance to war industry, including governmental establishments, and to the professions; and, (3) to augment the reservoir of trained personnel in the industrial hygiene field.

Industrial hygiene activities at the Federal level closely parallel this outline. In fact, the Division of Industrial Hygiene, National Institute of Health, promptly adopted this program for the duration. The Division is composed of three major sections: the Sections on Research, Dermatoses Investigations, and States Relations, supplemented by specialized professional units: Medical, Engineering and Statistical.

The first phase of the industrial hygiene program today—research and investigation—is being carried forward by our Sections on Research and Dermatoses Investigations aided by the Units. I have described much of our research in a previous paper.

I might add, however, that the Section of Dermatoses Investigations studies various dermatoses problems in industry, determining causes, and making recommendations. Requests for assistance are received from Federal, state, and local governmental agencies, and from industrial establishments themselves. Many of the field investigations made at the present time are performed at the request of the Ordnance Department of the United States Army.

In the field of dermatoses research, work is being done on vesicant war gases as an important potential cutaneous hazard. The lack of effective protective measures, especially for the civilian population, makes research in this field imperative. A neutralizing agent is sought as an agent suitable for incorporation in a protective ointment. The suitability of various materials for protective clothing has also been investigated.

One of the most troublesome conditions encountered among industrial workers is fungus infection of the feet. Studies involving both laboratory and field investigations are being made at the present time to determine how these infections are acquired and how they may best be prevented.

The Medical Unit performs epidemiologic investigations in plants together with engineers, chemists, and physicists. The medical staff is especially concerned with health and physical qualifications, whereas the other specialists point their investigations at environmental factors.

A few of the subjects studied in recent years are: silicosis and other pneumoconioses; metal fume fever in brass foundries; intoxications by such metals as lead, mercury, and manganese; compressed air illness, carbon monoxide; benzol; fatigue, and evaluation of physical impairments. The maximal permissible levels of atmospheric contamination are studied. Most of the investigative work has been cut to a minimum for the duration, and emphasis has been placed on applying our present knowledge.

The Engineering Unit serves as an advisory and fact-finding body. In many instances, this Unit is called upon to assist states and other governmental agencies in conducting investigations. Among the more common conditions studied are lighting, heating, inadequate ventilation, and numerous toxic exposures.

The Research Section of this Division is engaged in a wide variety of studies previously discussed. Our researches are directed exclusively to war problems; much of the work being conducted is for the Army and Navy, and therefore of a confidential nature.

It should be evident by now that the entire resources and facilities of the Division of Industrial Hygiene are at the disposal of all Federal, state, and other govern-

mental agencies, as well as labor and industry.

To solve industrial hygiene problems in the laboratory is one thing. To solve practical everyday industrial hygiene problems in the plant is another. Yet that is exactly the gap we must bridge to make our work effective. We must put across to industry the newer and better methods we have discovered, and show why and wherein their advantage lies.

The practical application of industrial hygiene methods in industry is carried out by the States Relations Section of the Division, which also acts as a clearing house for the war field activities. The Section renders services to industry, both directly and in cooperation with state units.

It gives administrative and technical advice to the units for the purpose of standardizing industrial hygiene practice throughout the country. To achieve this end, the Section has professional personnel constantly in touch with the state and local units, receives uniform reports on the work of the units, and analyzes these reports so as to be able to determine what advice and assistance the states need for strengthening their programs.

The Section also coordinates the training of personnel for various agencies, both official and nonofficial; renders field services to certain industrial military establishments; publicizes industrial hygiene methods through a workers' health education program; and cooperates with other agencies at the Federal, state and local levels, on all matters related to field activities in industrial hygiene.

One of the most important services performed by this Section is the inspection of Government industrial plants for the War Department. Seventy plants certified by the War Department for inspection have been investigated by crews composed of physicians, engineers and chemists, and reports on findings and recommendations have been submitted. In addition, a certain number of reconnaissance surveys were made in plants which were not in full production, but for which recommendations were made in the interest of health conservation.

As a further step in the integration of industrial hygiene services for the War Department, the Public Health Service, at the request of the Secretary of War, has assigned from the Division of Industrial Hygiene a physician and an engineer to the headquarters of the Safety and Security Branch of the Office of the Chief of Ordnance in Chicago. These two officers, in addition to a medical officer assigned by the Office of the Surgeon General of the Army, advise on industrial hygiene matters and expedite the adoption of best industrial hygiene practices throughout Ordnance plants.

Another important function of the Section is to recruit and train personnel for assignment to industrial hygiene work with state and local units. Essential field and laboratory equipment is also loaned to many of the states, thereby permitting them to carry on their work more effectively.

The States Relations Section also promotes industrial nursing consultant services in state health departments. As a result, considerable progress has been made during the past two years in industrial nursing. At present there are 18 states which have nursing consultants who are rendering valuable aid to industry, both in the extension of nursing services and also in better utilization of existing industrial nursing services.

The promotion of industrial dentistry through state and local health departments is coordinated through this Section. The program has for its aim the promotion of dental examination in preplacement and periodic examinations, coordination of the work of state dental and industrial hygiene divisions, and establishment of demonstration dental services in selected plants. The efforts of the dental consultant on industrial hygiene have resulted in the development of several programs within industry, and dental consultants in industrial hygiene shortly will be available in two of our important industrial states, Michigan and Illinois.

One of the methods employed in furthering interest and action in the field of industrial hygiene is the use of health education media. Like any other group of adults, war workers need similar information and training in health matters. If we wish them to work with us for better health on the production line, we must give them the opportunity to learn and to practice what they know.

Cooperative industrial hygiene programs have been developed with some of the war agencies. For example, the War Production Board has established 2000 labor-management production drive committees in war contract plants. Through the efforts of this Section, lists of these plants are supplied to state and local industrial hygiene units which, in turn, contact the committees in their respective states and offer their services. Each of these committees also obtains a copy of an outline of recommended industrial hygiene practices prepared and disseminated by this Section, which aids plants in the development of health conservation activities.

THE PROGRAM AT STATE LEVEL

Early in our emergency program, the Division could have developed a strong industrial hygiene organization at the Federal level. But in order to insure permanency and continuation after the war, it was thought wiser to utilize our emergency funds to strengthen the work in the states. It is hoped that through the personnel now on loan from the Division to the states, industry and labor will realize the value of industrial hygiene, so that the programs will remain after the war and the personnel will be absorbed by the states.

At the present time there are industrial hygiene units in 38 states, six cities, two counties, one territory, and the Tennessee Valley Authority. These areas contain practically the entire labor force of the Nation, and the units at present have approximately 350 persons employed on industrial hygiene work. The amount of money spent by these state and local units is well over $1,000,000. During the fiscal year 1942, reports received from 35 units in 29 states show that services were rendered by them to 5,700 establishments employing 2,533,000 workers. An analysis of the activities of state and local units indicates that the programs should be expanded and the organizations strengthened to permit more follow-up work, the stimulation of occupational disease reporting, more health education work, and, in some instances, decentralization of the state unit for quicker and closer contact with the plants.

A glance at conditions in your State of Louisiana shows that this state has been predominantly an agricultural state. Yet it has a large shipbuilding industry and the number of Louisiana workers in this occupation increased from 1,300 in January, 1940, to 24,000 in 1942.

Here also is the largest chemical plant in the South,[1] the largest rice milling plant in the country,[2] a large shell loading plant, a munitions depot and an ammonia plant. I understand a magnesium plant, a butadiene rubber plant, and an aviation gasoline refinery are under construction.

It appears that your labor supply is adequate except for skilled workers. However, reports are that certain plants are experiencing high labor turnover occasioned by the employment of women, lack of housing facilities within convenient distance, lack of work experience, and by physical and health hazards in certain occupations, such as shell loading.

May I suggest that these plants with special problems to solve make the utmost use of the excellent industrial hygiene unit Louisiana has. An industrial hygiene unit, as you may already know, includes medical, chemical, and engineering personnel, as well as consultant services on numerous health problems.

When an industrial hygiene unit goes into any plant, it evaluates the potentital hazards, analyzes the efficiency of existing health safeguards, and recommends necessary improvements.

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[1] Mathieson Alkali Works, Inc., Lake Charles.

[2] L. A. State Rice Milling Co., Inc., Lake Charles.

The chemist acquaints himself with the specific materials used in the plant. He determines which of the substances constitute potential or actual hazards to health. He is aware of the wide range of toxic exposures in manufacturing procedures. He knows that almost three million American workers are on jobs where organic dusts are potentially dangerous—jobs where by-products like carbon monoxide may reach dangerously high concentrations. He knows that three quarters of a million men work with lead and its compounds; a quarter million handle sulfur dioxide; a hundred thousand are exposed to chromium.

In the meantime, the engineer has been examining ventilation, lighting, safety equipment, workbench space and mechanical fatigue hazards. He must also plan for mechanical control of toxic exposures.

Armed with the facts and figures supplied by the chemist and engineer, the doctor checks the physical condition and clinical history of every worker in the plant. If there is a medical service in the plant, he works closely with the physician in charge. He advocates the preplacement examination, regular examinations on the job, and careful maintenance of absentee records.

The chemist, the engineer and the doctor pool their observations. The chemist may suggest chemical methods of control—substitution of nontoxic or less toxic materials for those in use. The engineer may suggest a better ventilation system. The doctor's job is perhaps more complex than his co-workers'. If the recommendations made by the chemist and engineer are not carried out or maintained at peak efficiency, the doctor is the first to note the storm signals as they appear in headaches, fatigue, stomach disorders, unexplained nervousness, and sudden drop in the blood count.

Some states have developed emergency educational programs for industrial physicians. Indiana, for example, has planned both an intensive two-day course and a three-weeks' course in industrial hygiene for private practitioners. About 80 per cent of Indiana's industry is serviced by part-time physicians who, when given further training, will probably serve as a pool from which to draw any needed "full-time" industrial physicians.

THE PROGRAM AT PLANT LEVEL

An effective plant industrial hygiene program, as outlined by our Division, includes four types of service: medical, engineering, safety, and welfare. These four services plan for health and efficiency, taking into consideration conditions in the plant, in the home and community, and the health condition of the individual.

The plant medical service is the responsibility of the industrial physician. Whether he is employed part-time or full-time—this is his responsibility. In most cases he will be assisted by a professional staff, which in a large plant may include other physicians, nurses, technicians, and dentists. Under the supervision of the medical director, this group will furnish emergency care of employees disabled on the job; provide continued treatment of employees suffering from occupational diseases or accidents; examine all employees and executives annually; examine monthly all workers who are exposed to poisonous materials on their jobs; and in cooperatiton with the safety and engineering departments, will inspect all health and accident hazards on the jobs.

The medical service should also maintain, analyze and tabulate sickness records in the plant; cooperate with the personnel department in proper placement of new workers through the preplacement examination; promote a health education program for employees and their families and make plans for handling large numbers of injured in event of disaster.

The engineering and safety services are responsible for the detection and removal or control of environmental conditions in the plant which endanger health and safety. The industrial hygiene engineer is one who combines the "know-how" for the control of occupational diseases with the "know-how" for prevention of accidents, including practical experience in the maintenance of production. It is not always necessary for

a plant to have the full-time services of these specialized engineers, so it is suggested that plants use the services of governmental industrial hygiene bureaus to obtain surveys and consultation. However, it is advisable to appoint one responsible person, preferably an engineer, to work with the governmental industrial hygiene unit in making surveys and working out steps to be taken.

Only the largest industries have welfare departments for employees. Trained welfare workers are not a necessity, but some organization should be established to deal with workers' problems. The War Production Drive Committee perhaps might constitute itself a welfare service. A workers' committee might be formed. The committee should work closely with the medical service, personnel department, employees, and the executive offices.

Several problems not directly connected with the working environment will be the concern of the industrial hygiene program, the first of which is medical care for nonoccupational disability. A few large, progressive firms and labor unions have already developed excellent services for the care of employees and their families, including medical, dental, surgical, nursing and hospital care. On the whole, however, plant medical services have not yet broadened their scope to include this general medical care.

Other health matters to be considered are: adequate housing, sewage disposal, safe water, milk supply, restaurant inspection, inoculation against communicable diseases, and adequacy of medical facilities. The in-plant program should provide some means of putting every worker in touch with a well-qualified physician whenever sickness occurs in his family. Likewise, the nutrition program and problems of fatigue, night shift, and hours of work should concern the health service.

Health and safety education for workers and their families should be sponsored as part of a good industrial hygiene program. One of the most difficult tasks facing a plant industrial hygiene service is convincing the people who wear the respirators and the protective gloves and the safey hairnets that such devices are essential to their well-being. The preplacement and periodic physical examinations can be used to advantage by physicians for educational purposes. Here is an opportunity to drive home to the worker the importance of protective measures.

A general health education program can and should be scheduled in many plants. It might include talks, motion pictures, demonstrations, pamphlets, and posters.

THE LOCAL HEALTH DEPARTMENT

As I have suggested before, the industrial hygiene program ties in closely with the community health program. For example, the venereal disease clinic, the nursing service, the sanitation section, and the maternal and child health service must reach the industrial worker and his family directly, and preferably through the industrial hygiene service and the plant physician. The local health department, correspondingly, is the channel through which industrial hygiene services can be brought to bear directly on the health problems of workers in small plants.

As Sir George Newman has written: "In recent years we have learned that public health is not only a matter of the postponing of mortality and the prevention of sickness, but of the positive side of health—the increase of vitality, capacity, and efficiency of the human body. Our aim is not only to oppose diseases but to advance and develop physical fitness and well being. To secure this end, we must have regard to the whole life of man—his heredity and upbringing, his work and rest, his food, his habits, his environment. We must pay attention not only to his actual ailments and diseases, but to the conditions making for a maximum degree of personal health. Thus it comes about that a new relation is found to exist between occupation and health. In a word, the health of the industrial worker forms an integral and inseparable part of the health of the community."

It is for this reason that every state, county, and local health department has a

responsibility to cooperate with industrial management, labor, and private medicine in attaining their common goal—better personal and more efficient group health.

A complete industrial hygiene program depends upon industry, labor, public health, and private medicine. This truth is supported by the fact that two-thirds of the workers in this country are not provided with full-time or even part-time medical services at the plant. They depend upon their private physicians, or go without. This places an important responsibility upon the practitioner who sees industrial workers, either as their family doctor, as an industrial physician in the plant, or as a health officer.

The Federal, state and local industrial hygiene programs have the facilities and the function to provide such services as investigation, consultation, personnel and training. No Aladdin's lamp is needed to call these public health utilities into action. A telephone will do the job!

The universal goal of medical men—private, industrial, and public health—is the creation of a healthier, more vigorous America. Wider application of industrial hygiene is one of the most important steps toward this goal.

Close cooperation between the physician in industry, in public service, and in private practice toward the betterment of workers' health constitute another important stride toward this goal. In this present world-wide conflict in which we have everything to gain and also everything to lose, we can and must bend every ounce of effort in this direction—the maximum health and safety of all workers.

A COMPARISON OF THE ZIEHL-NIELSEN AND THE MOSS COLD CARBOL FUCHSIN STAINS FOR ACID FAST BACILLI

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This paper is a report on the results obtained comparing the conventional Ziehl-Nielson with Moss' cold carbol fuchsin method for the staining of acid-fast bacilli. The essential difference between the two methods is that in the latter the prepared smears are first placed in commercial formalin for eight minutes, rinsed in water, and then placed in *cold* carbol fuchsin eight minutes. The remainder of the procedure is then the same as the Ziehl-Nielsen method—decolorization in acid-alcohol and then counterstaining with methylene blue.

MATERIALS

The sputa used in these examinations were selected at random from the daily specimens sent to the diagnostic laboratories of Charity Hospital from the patients in the Dibert Tuberculosis Hospital. The sputa received daily represented both known and suspected cases of tuberculosis.

METHODS

Each sputum was divided into two equal portions. One portion was autoclaved at 20 pounds of pressure for 30 minutes and the other portion was left untreated. Duplicate smears of each portion were prepared. In the unautoclaved material, smears were made whenever possible from the small yellowish caseous or yellowish-green, thick, mucoid portions of the sputum. In the autoclaved material, the sputum did not lend itself to the selection of caseous or mucoid plugs.

One of the duplicate smears was stained by the standard Ziehl-Nielsen method and the other by the Moss cold carbol fuchsin method. The Ziehl-Nielsen method which was employed consisted of staining the smear with steaming carbol fuchsin (dye content 94 per cent) for five minutes and decolorizing in acid-alcohol.

The Moss method consisted of flooding the dried smear with cold formalin for eight minutes, washing in water, and then staining with cold carbol fuchsin for one

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or two minutes. The smear was then washed, decolorized in acid alcohol, and then counterstained with methylene blue for 30 seconds.

The autoclaved specimens were also concentrated by centrifugalization for 30 minutes at 1500 r. p. m. One loopful of the surface film was removed and placed on a clean slide. To this was added a loopful of the sediment, and both were mixed together and smeared. These smears were stained by the cold carbol fuchsin method only.

The smears which were reported negative were all examined by covering the entire length of the slide once.

RESULTS

Method	Ziehl-Nielsen Unautoclaved	Moss Method Unautoclaved	Ziehl-Nielsen Autoclaved	Moss Method Autoclaved	Centrifuged Moss Method
No. of specimens	50	50	50	50	50
Total positive	24	24	21	23	25
Per cent positive	48	48	42	46	50

Essentially there is no difference in the percentage of positive results obtained between the Ziehl-Nielsen and the cold formalin method in the unautoclaved specimens, both being 48 per cent positive.

In the autoclaved specimens, the cold formalin method gave 56 per cent positive, while the Ziehl-Nielsen gave 42 per cent, or a difference of 4 per cent. It will be noted that between the unautoclaved and the autoclaved specimens by the Ziehl-Nielsen method there is a difference of 4 per cent, while in the same specimens stained by the cold formalin method, there is a difference of only 2 per cent. This difference in positive results between the unautoclaved and autoclaved specimens can be explained in view of the fact that on autoclaving, the sputum coagulates, thus making it difficult to pick up the small white or yellow caseous portions which are so often positive for acid-fast bacilli. Thus, when the sputum is coagulated, unless there is an abundance of acid-fast bacilli, and in many cases there is no such abundance, the sampling tends to be inaccurate since it is purely a matter of chance.

The centrifuged specimens showed the greatest percentage of positives, 50 per cent, as was to be expected since it is more searching. However, in a large laboratory where numerous sputa are examined daily this method is not feasible from the standpoint of time and amount of material required. It is felt that an ordinary smear in routine cases is sufficient. However, should repeated examination on different samples be negative, it is suggested that a concentration by centrifugalization be done.

It was found that on staining the smears eight minutes in carbol fuchsin, as suggested by Moss, the organisms took a deep red color. This staining time was cut down and it was found that a much more satisfactory stain was obtained if the smear was stained for only three to four minutes in the cold carbol fuchsin, thus giving a light red against a dark blue background. This short time did not readily affect their decolorization. In fact, smears were left in acid alcohol overnight and read the next morning. On examination the organisms were found to retain the dye. Evidently the formalin, through a physico-chemical reaction, sensitized the cells in such a manner that they accepted the dye readily and resisted decolorization.

With the above results the following procedure is given for staining smears with the cold formalin method for examination of acid-fast bacilli:

1. Prepare smear in usual manner.
2. Cold formalin—commercial grade (40 per cent), eight minutes.
3. Rinse in water.
4. Cold carbol fuchsin, three to four minutes.
5. Rinse in water.
6. Decolorize in acid-alcohol, one minute (maximum—overnight).
7. Counterstain with methylene blue, 30 seconds.

SUMMARY

1. Duplicate results were obtained by using Moss' cold carbol fuchsin method in

comparison with the Ziehl-Nielsen method.

2. Much time is saved by the use of the Moss cold carbol fuchsin method, since it does not require steaming the slide.

3. Objectively better smears were obtained by using a shorter staining time.

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DYSMENORRHEA*

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The occurrence of pelvic pain just before or during menstruation has been discussed for centuries, and it is still an important problem in gynecology. Though we have recently acquired considerable new information regarding its cause and treatment, much confusion of ideas and experimentation in therapy is prevalent. This is particularly illustrated in the field of endocrine therapy, where many reports of extremely promising results have failed to stand the test of time and critical evaluation. This paper will consider some aspects of the problem of management of primary dysmenorrhea, about which there is at present a need for further clarification and critical evaluation.

TYPES OF DYSMENORRHEA

In considering dysmenorrhea one should first recognize that the patients are usually assignable to two distinct groups. The first group includes those who have secondary or extrinsic dysmenorrhea. Patients with secondary dysmenorrhea have demonstrable pelvic pathology responsible for the painful menstrual periods. The most frequent causes of secondary dysmenorrhea are: pelvic inflammatory disease, fibroids, endometriosis, stricture of the cervix, adenomyoma, and to a lesser degree, displacement of the uterus. The cause of dysmenorrhea in a patient of this group having been ascertained, the therapy is obvious, and the results of therapy are good. The second group is composed of patients having primary, idiopathic, or intrinsic dysmenorrhea. In these patients we cannot demonstrate organic pelvic pathology to which the painful menstruation may be attributed. The cause of primary dysmenorrhea is unknown, although the theories of causation are numerous; the management varies widely and the results of the same types of therapy differ in various reports. It is this type of dysmenorrhea which is found usually in young women, who may or may not be married, and who have normal pelvic organs. Their menstrual pain may be mild or of such severity that the patient comes to dread the approach of the menstrual period. The pain may begin a day or two, or three, before the menstrual period and extend through the first day or two of flow. Patients frequently have to remain in bed for a day or more each period, and may be forced to resort to mild or marked sedation. It is the management of this group of patients that will be particularly considered.

INCIDENCE OF DYSMENORRHEA

There are wide discrepancies in the incidence of dysmenorrhea as reported by various writers. The discrepancies arise from differences in the manner of obtaining information, the care with which primary and secondary types were differentiated, and the interpretation of the subjective symptom "pain." Bell and Parsons reported that 12 per cent of 840 University women had severe menstrual pain. Cunningham studied a group of 14,268 University women, reporting a dysmenorrhea incidence of 50 per cent. Emge found that 2.8 per cent of 4,500 patients had dysmenorrhea, while Lakeman found that 89.6 per cent of a group of 365 industrial workers reported painful menstrual periods. Pullen and Hamblen recently summarized the reported incidence of dysmenorrhea in the literature and concluded that "possibly 50 per cent or less of healthy women experience dysmenorrhea of a varying degree, and that possibly 1-5 per cent are forced to retire during par-

*Presented at the Post-Graduate Week in Obstetrics and Gynecology, April 24, 1943.

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ticularly severe bouts of menstrual pain." Regardless of the exact incidence, dysmenorrhea, and particularly primary dysmenorrhea, is an all too common gynecologic condition, and to the patient who comes to the physician demanding relief it is a very real and important disability.

CAUSES

That the etiology of primary dysmenorrhea is still unknown is clearly attested by the voluminous literature on its theoretical causes. Among the important causal factors considered are: (1) Uterine hypoplasia; (2) psychogenic factors; (3) neurogenic factors; (4) endocrinopathies; (5) alteration in uterine motility; (6) alteration in endometrial fragmentation; (7) alteration in carbohydrate metabolism; (8) obstructions of cervical canal; (9) extragenital factors including allergic states.

TREATMENT

Recently the endocrine causes of dysmenorrhea have received considerable attention, and the literature has been flooded with conflicting accounts of the use of various endocrine substances in the management of primary dysmenorrhea. Pullen and Hamblen have recently discussed these at some length, listing the following classifications of endocrine causes.

I. Dysmenorrhea related to altered estrogen metabolism:
- (a) Estrogenic deficiency
- (b) Excess of estrogen
- (c) Estrogen unbalance

II. Dysmenorrhea related to altered progestin metabolism:
- (a) Progestin deficiency
- (b) Excess of progestin
- (c) Inadequate progestin metabolism

III. Dysmenorrhea related to altered androgen metabolism:
- (a) Androgen deficiency
- (b) Excess of androgen

IV. Dysmenorrhea related secondarily to thyroid diseases.

V. Dysmenorrhea related secondarily to altered carbohydrate metabolism.

I am in full agreement with Novak, who states "certain newer studies make it seem probable that dysmenorrhea is much more frequently due to endocrine dysfunction than we believed only a few years ago." However, a mere glance at the list of endocrine causes reveals at once the complexity of the problem of endocrine therapy in the individual case of dysmenorrhea, and at once explains the conflicting results obtained. A finger of caution, and warning, should be pointed at the indiscriminate use of hormone therapy. In dysmenorrhea, as in all other endocrine dysfunctions, hormone therapy should be utilized only after careful study of the patient and therapy must of necessity be individualized.

A more complete discussion of the various theories of causation of dysmenorrhea can be found in any of the more recent texts on gynecology and need not be treated here.

Treatment should be instituted only after a thorough history and physical examination have been done. In obese or malnourished patients, correction of these conditions will cure the dysmenorrhea in many instances. The presence of anemia, tuberculosis, nephritis and other systemic disorders or diseases must be ruled out, and treated. Not infrequently change in environment or corrective exercises for the sedentary worker will correct her menstrual complaint. Simple antispasmodics (tinct. belladonna: 10 gtts. tid) and mild sedatives (phenobarbitol, gr. ½, tid) used for two to three days before and during the first two days of the period will help. The psychogenic factor is quite important, and psychotherapy is frequently of value. Then, too, we must agree with the old statement that in some cases at least "dysmenorrhea is the protest of the disappointed uterus" and pregnancy may bring an end to the patient's lament. Pregnancy does not cure nearly so many cases of dysmenorrhea as once supposed, and should be advised with caution and due reservation as to the benefits to be derived therefrom. It is often embarrassing to have a patient assured of a "pregnancy cure" return with severe dysmenorrhea and reasonably demand that we explain its recurrence.

When we have exhausted the possible benefits to be obtained from the simpler

measures of diet, exercise, change in environment, simple sedation and antispasmodics we may consider the use of endocrine therapy.

By far the most valuable hormone in the treatment of dysmenorrhea is thyroid. Thyroid should be used far more liberally than in the past. To be effective it should be used to clinical tolerance, to a large extent ignoring the basal metabolic rate. While it is advisable to have a preliminary basal metabolic rate and subsequent ones to check the effect of medication, clinical signs of overdosage are more valuable and should be closely observed. Thyroid should be given in dosages of ¼ to ½ gr. three times a day and increased or decreased as indicated.

Where simpler measures plus thyroid are not efficacious, the other hormones may be tried.

Estrogenic hormone gives the best results when administered to women who have dysmenorrhea associated with uterine hypoplasia. The hormone is given in cyclic fashion in the first half of the cycle. Estrogen is given two to three times weekly in doses of 25,000-50,000 i. u. for the first two weeks of the cycle. It may be administered orally in equivalent dosage for the first two weeks of the cycle. We usually use .5 mg. stilbestrol once or twice daily. In those patients who cannot tolerate stilbestrol we use biologic estrogens in equivalent amounts. A reasonably large number of patients with hypoplasia of the uterus and dysmenorrhea respond to this therapy.

Estrogens may also be used in women with normal uteri to suppress ovulation by inhibition of the pituitary. In this type of patient estrogen is also given in cyclic fashion. Caution should be used here against the prolonged use of the hormone because of the possible damage to the ovary. Therapy should never be continued for longer than three months without interruption.

Corpus luteum hormone is of value in other cases. It is given both because of its relaxing effect on the myometrium, and to restore the normal estrogen-progestin metabolism. It is usually used in women with normal uteri, and is given in the last portion of the cycle. It may be given intramuscularly in dosages of 1-2 mg. daily for the last three to eight days of the cycle, or in equivalent amounts (approximately 5 times the intramuscular dose) orally for the same period. A gratifying large percent of selected cases will respond to this therapy. It may also be used in the second half of the cycle when cyclic sterol therapy is used to "splint" the ovary. Estrogen (.5 mg. stilbestrol, or its equivalent in biologic hormones) is given for the first half of the cycle; corpus luteum hormone 1-2 mg. daily is given in the second half of the cycle. Using this therapy an artificial (anovular) period is produced which is pain free. This may be done for two or three months and should then be interrupted. In many women, especially when there is a large psychic factor present, the freedom from pain experienced during these cycles seems to break the dread with which they anticipate their periods and may be followed by many months of normal, pain-free cycles. Prolonged use of cyclic sterol therapy will damage the ovaries and its use is therefore limited.

The procedure of D & C and of D & C and stem pessary is time-honored and still quite useful. It should be used when other measures including diet, exercise, sedation, antispasmodics and endocrine therapy (excluding androgens) have failed after adequate trial. Women are frequently relieved of dysmenorrhea for several months by a simple D & C and not uncommonly may be relieved for much longer periods of time.

Patients who definitely have primary dysmenorrhea which is refractory to all other types of therapy, adequately administered for a long enough period of time, may be given male sex hormone therapy. I am rather wary of testosterone therapy and use it only in preference to sympathectomy which remains as therapy of last resort. Prior to using sympathectomy all other forms of medical and endocrine therapy

and the simple surgical procedure of D & C and stem pessary should be tried. Testosterone is given orally in dosages of 10 mg. twice weekly throughout the cycle or in the last half of the cycle and may be increased or decreased in subsequent cycles. The total dosage in a month should not exceed 200 mg. The total dosage should not exceed 600 mg. before a period of rest is given. The patient must be warned of possible virilistic changes (voice, hirsutism) which may occur, and one should constantly observe the patient while under treatment, watching for the development of these signs. In a carefully selected, closely supervised, small group of patients this therapy has worked very well.

When all the foregoing methods have been exhausted, a matter of final resort in a very selected group of patients is superior hypogastric sympathectomy. The procedure is not unduly difficult from the technical viewpoint and is always successful, if the patient is properly selected and adequate resection of the sympathetic plexus is done. The chief criticism of this procedure is that it cures dysmenorrhea by removing the pain pathways and does not in any sense correct the underlying pathology. I am in accord with those who point out that a gynecologist who can report a large series of superior hypogastric sympathectomies probably has not adequately studied his patients or given them full benefit of other forms of therapy. When used, however the resection of the nerve plexus must be adequate if good results are to be obtained. The removal of the superior hypogastric plexus does not interfere with the normal physiology of menstruation or pregnancy.

Finally, in the management of primary dysmenorrhea, one may use the following outline of therapy:

1. Adequate history and physical—rule out secondary dysmenorrhea.
2. Regulation of diet, exercise, environment. Correction of obesity, malnutrition, anemia and so on.
3. Simple sedation, antispasmodics, and psychotherapy.
4. Thyroid.
5. Thyroid plus cyclic estrogenic therapy.
6. Thyroid plus cyclic progestin therapy.
7. Thyroid plus cyclic sterol therapy.
8. D & C.
9. D & C and stem pessary.
10. Androgenic therapy.
11. Superior hypogastric sympathectomy.

CONCLUSION

Dysmenorrhea cases are divided into primary and secondary types. The secondary group has demonstrable pelvic pathology to which we can attribute the menstrual pain; the common causes are stricture of the cervix, endometriosis, pelvic inflammatory disease, fibroids and displacement of the uterus. The management of secondary dysmenorrhea is usually a correction of the underlying pathologic cause.

The specific cause or causes of primary dysmenorrhea have not as yet been clearly defined. Each patient should be carefully studied, and the therapy individualized. While endocrine therapy is valuable and the results good in well selected cases, the indiscriminate and haphazard use of hormones in the treatment of dysmenorrhea, as well as other endocrine dysfunctions, is to be deplored. The use of medical and endocrine methods of therapy should be exhausted, and the simpler surgical procedure of D & C and D & C and stem pessary used prior to the employment, as a matter of last resort, of superior hypogastric sympathectomy.

THE MALE SEX HORMONE

ITS USE AND ABUSE*

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The purpose of this paper is to present a review of the scientific substratum upon which our present day concepts of the male sex hormone rest. There is no pretense of an exhaustive survey of the problem, for the magnitude of task is beyond the scope of this limited paper.

*Presented before the Rapides Parish Medical Society, May 3, 1943, at the Station Hospital, Camp Livingston, Louisiana.

EMBRYOLOGY

The male gonads or testes are paired compound organs which arise from the genital ridge of the Wolffian body. Differentiation between ovary and testes occurs about the sixth or seventh week of embryonic life. In man the testes descend at the third month from their origin at the level of the second lumbar vertebra to the iliac fossa, and at the sixth or seventh month to the abdominal inguinal ring. Extending from the bottom of the fetal testis is a fibrous band (gubernaculum) which serves as a guide for testicular descent into the scrotum. This occurs in the last month of intra-uterine life. The scrotum may be considered as an evagination of the wall, and the placement of the testes in the scrotum insures proper temperature for spermatogenesis.

HISTOLOGY

In addition to the seminiferous tubules, there are present slender pillar-like elements, arranged perpendicular to the basement membrane, to which they are attached. These are designated as "sustentacular" or Sertoli cells. The exact function of these cells is not clear, some believe that they aid in the metabolism of spermatozoa. Scattered in the loose connective tissue are clumps of irregular shaped polyhedral cells, known as the interstitial cells of Leydig. Each nuclei contains chromatin granules and one or two nucleoli. Immediately adjacent to the nucleus is a large attraction sphere surrounded by golgi apparatus. The peripheral cytoplasm contains numerous mitochondria. In fresh condition the cytoplasm contains refractile granules which react positively to tests for neutral fats and lipoids. The most interesting inclusion bodies are rod-shaped crystalloids with rounded ends. The interstitial cells are abundant at birth, decrease in numbers subsequently and reappear in full activity at puberty. It is these cells which are commonly believed to be the elements that produce the male sex hormones.

HISTORICAL SURVEY

To the interested student of this subject, a chronologic review of this phase of endocrinology together with an excellent appended bibliography is presented by Newerla.[1]

The testis was the first organ suspected of, and associated with internal secretion, as well as the first gland subjected to animal experimentation. The ancients noted the effects of castration upon animals, and upon eunuchs who were part of the social order.

Some of the contributors lending lustre to this interesting phase of endocrinology were: Aretaeus the Cappodocean,[2] 150 A. D., who in his chapter on gonorrhea stated, "for it is the semen, when possessed of vitality which makes us to be men, hot, well braced in limb, well voiced, spirited, strong to think and to act. For when the semen is not possessed of its vitality, persons become shrivelled, have a sharp tone of voice, lose their beard, and become effeminate as the characteristics of eunuchs prove." John Hunter[3] in 1762 attempted to ascertain whether the genital organs of one sex could be grafted to and grown in the body of the opposite sex. He transplanted the testicles of a cock into the abdomen of a hen. Some grafts took root, but he considered the experiments as incomplete, and of no value. However, he failed to mention masculinization effects observed with a few successful transplants. In 1848 Berthold of Gottingen[4] transplanted the gonads into castrated roosters, presenting the typical effects of castration. This was the first experimental demonstration of hormonal action of any type. His clear demonstration of the productive influence of the testicle, that is, its effect on the blood, and through the blood upon the organism generally, was published in a five page monograph which remains the only noteworthy epitaph of an author who wrote voluminously on other subjects.

In 1889 Brown-Sequard[5] published his famous paper on self-rejuvenation (beneficial influence on general health, muscle power, and improved mental activity) after autotherapy with testicular extracts prepared from dogs' testes. The unfortunate part of Brown-Sequard's work was the un-

scientific manner of investigation and the heralded claim of rejuvenation. With the possible exception of the search of Ponce de Leon, the ageless quest for perpetual youth was never brought so attractively before the attention of the world. Much of his so-called therapy was useless, and unproved by competent contemporaries, or successors of Brown-Sequard. The inevitable result was that strong prejudice for and against a mode of therapy was built not on controlled observations and experimentation, but rather on wishful conclusions, inactive preparations and useless grafting operations.

McGee,[6] in 1926, working in Koch's laboratory (University of Chicago), was the first to prepare a lipoid extract from fresh bull's testis—0.01 mgm. of which would restore the atrophic comb of a capon.

In 1930 Butenandt[7] of Danzig, succeeded in isolating in crystalline form 15 mgm. of two chemically pure substances (androsterone and dehydroandrosterone) from 15,000 liters of male urine. He found that these products were sterols, and that they were closely related to the female hormone, estrone.

In 1935 David,[8] working in Laquer's laboratory in Amsterdam, isolated testosterone from bull's testis, just before Ruzika's[9] laboratory synthesized it from cholesterol. This substance proved to be more potent than the androsterone of Butenandt.

The male hormones are derivatives and gradations of sterols, and are related to those found in bile acids, adrenal cortex, cardiac glucosides, some vitamins and carcinogens. Androgenic substances have been isolated from urine, feces and adrenal glands.

BIOCHEMISTRY

The term "androgen" is used to describe any substance having masculinizing properties, and which promotes the growth of accessory organs of reproduction in the castrated male mammal. The androgen secreted by the testes is known as "testosterone."

Very little is known about the metabolism of the male sex hormone. The urine of normal men contains androsterone and dehydroandrosterone in rather large quantities as compared with the low titers found in the tissues. Although these substances have been isolated from the urine, their mode of formation, that is, whether they are formed from testosterone or other precursors, is not known. Part of the hormone in the body fluid (i. e. urine) is free, while part is combined as a glycuronide. The former fraction (free) is soluble in benzene, while the latter is not. The activity of testosterone is enhanced when combined with a fatty acid, as is the case with testosterone propionate.

Variation in the daily excretion of androgenic substances in a given individual is very considerable, and must be assayed over a period of time. The average for a normal male is 66 international units per day.[10] The international unit is defined as the androgenic activity which is produced by 0.1 mgm. (100 micrograms or gammas) of androsterone.

Estrogenic substances are also secreted by the male. Their excretion may vary, but the normal average is 100 international units or the equivalent of 10 gammas of theelin per day.[10] The international unit of estrogenic activity is defined as 0.1 gamma (0.1 microgram) of a standard preparation of estrone. Various other units have been used to express estrogenic activity. The mouse unit corresponds approximately to one international unit, the rat unit to about three international units.

Recent studies indicate there is little or no estrogenic activity in the urine of male or female children before 10-11 years of age.[11, 12] For boys beyond this age the daily excretion varies between 10-60 international units per day of estrogens, for girls the excretion varied between 10-80 international units per day.

Excretion of androgens occurs in both male and female children. The excretion is proportional to age, but more recent work[13] indicates such proportions hold better for physical age and development, than merely the age in years.

The excretion of androgens appears to be at a maximum during the period between 20-40 years of age.[14] Beyond this period there is a definite decrease.

PHYSIOLOGY

The combined efforts of clinicians and laboratory workers have yielded the following fundamental physiologic data. The testis has a two-fold function: (1) to produce an abundance of healthy spermatozoa (exocrine); (2) the production of male sex hormone from the interstitial cells (endocrine). Testicular hormone is produced only in vertebrates, and its influence is exerted upon the accessory organs of reproduction. The extent of the interrelationship between the exocrine and endocrine structures of the testis is not yet clearly defined. The production of the male sex hormone in the normal adolescent male results in the development of secondary sex characteristics; namely, changes in the pitch of voice, growth of the penis, scrotum, prostate, seminal vesicles, epididymis, vas deferens, body hair, beard, skeletal growth, and masculine patterns of aggressiveness, vigor and self-confidence. These striking effects can be duplicated by administration of the hormone to patients with testicular deficiency.

A delicate balance exists between the anterior lobe of the pituitary and the gonads.[15] Thus the production of testicular hormone depends on the presence of the gonad stimulating hormone of the pituitary, and like the secretion of other peripheral glands, testosterone appears to exert a specific inhibitory action on the pituitary gland.[16] The administration of large doses of testosterone to women inhibits follicle formation, ovulation, and the formation of the corpus luteum in the ovary, probably through its effect on the pituitary.[17]

The role of testosterone in body metabolism has been demonstrated thus: Under its influence, the basal metabolic rate in hypogonadal patients was observed to be elevated.[18, 19] Likewise, the lowering of the respiratory quotient suggested a greater oxidation of fats.[20] The androgens are chemically similar to the hormones of the adrenal cortex, thus exhibiting the metabolic effects of adrenal cortical hormones. The electrolyte metabolism is affected, and the administration of testosterones causes the retention of extracellular electrolytes and fluids. In addition, the excretion of nitrogen, phosphorus and potassium is diminished, indicating a retention of the essential cellular as well as the extracellular constituents.[21] The locus of action is probably in the renal tubules.[22] Also of interest is the observation that the injection of testosterone into experimental animals causes a marked enlargement of the kidneys and renders the organ less susceptible to toxic agents.[23]

Further clinical data show that testosterone plays an important part in the growth of muscle and bone of patients with testicular deficiency.[24, 25] Dermavascular improvement,[26] as well as an increase in the red blood cells and hemoglobin, has been reported in eunuchoid men under testosterone therapy.[27] It has been suggested that testicular secretion in relationship to the androgen-estrogen ratio, may play a part in the acne vulgaris of adolescent boys,[28] and may be a factor in the development of common baldness.[29]

ORGANOTHERAPY

Though the androgenic preparations have been used in therapeutics for such a short time, they have found application in a large variety of clinical disease entities. For purposes of appraisal, diseases subjected to testosterone therapy have been divided into three classes.

1. *Diseases peculiar to males*: In this group one finds the most physiologic and rational indications for testosterone therapy, and as a result one finds the most encouraging reports of definite benefit derived from this form of medication in all types of testicular failure.[30] Infantile genitalia enlarge, (except for the testes) erections and ejaculations occur, the growth of masculine hair is stimulated, and eventually a beard may develop. Increase in virility is reflected in changes in body contour, enlargement of the larynx with deepening of the voice, and changes in the skin and mus-

culature. Either as a direct result of hormone therapy, or indirectly by encouraging changes, the emotional status improves, there is increased confidence and aggressiveness, and a greater emotional stability.

Since testosterone stimulates only secondary sex changes with no effect on the development of the testicle or spermatozoa, treatment of delayed puberty without a chance for onset of normal testicular function is considered unwise.[31]

There is some clinical evidence that androgens may prove of limited value in the treatment of cryptorchidism. Some favorable results have been reported in this condition with testosterone and some of the gonadotropins.[32] This form of therapy should be considered, and probably deserves a trial before resorting to surgical intervention.

Controversial reports in the literature on the use of testosterone[33] in benign hypertrophy of the prostate have been recorded. However, there is little evidence that the administration of androgens can cause involution of an existing hypertrophy, and there is always the possibility that the male sex hormones may cause a still greater enlargement of the gland. There may be some indication that nocturia, dribbling, and control of the urinary stream may be benefited by androgen medication, but the effect may be secondary to a generalized improvement in muscle tone or other changes rather than to a specific action on the prostate.[34] The use of this hormone may be of value in early cases and in poor operative risks.

The treatment of male sterility,[35] and functional impotence,[36] has proved on the whole discouraging. This form of therapy should not be used for disorders of sperm formation, since it actually suppresses spermatogenesis.

Striking improvement following the use of the male sex hormone in the so-called male climacteric has been reported with complete alleviation of psychosomatic symptoms and the return to a normal psychologic state.[37]

2. *Therapy in gynecologic conditions:* Androgen therapy has not been limited to diseases of males, for in a wide variety of gynecologic disorders, purported useful clinical application has been found for the male hormone. These are mastodynia,[38] post-partum engorgement of the breasts,[39] inhibition of lactation,[40] functional uterine bleeding,[41] dysmenorrhea,[42] treatment of uterine fibroids,[43] premenstrual tension,[39] afterpains,[39] pelvic inflammatory disease,[44] endometritis,[45] nocturia from various causes,[46] and nymphomania.[47] In the menopause,[48] treatment with testosterone has yielded more encouraging results than that with estrogens. The rationale for the use of this hormone in the treatment of menopausal symptoms is its expeditiousness in suppressing ovulation without endometrial stimulation.

3. *General diseases:* As with all new drugs the radical trend of testosterone therapy is its use in a variety of disease entities without a sound physiopathologic basis for such use. The widespread systematic effects noted in the treatment of hypogonadal states with the male sex hormone suggests the possibility that it may influence systems other than the urogenital tract.

Testosterone alone or combined with gonadotropins has been used and recommended in cases of retarded growth[49] where it increases growth rate and bone development.[50] Conversely, it has been reported to be useful in arresting abnormally rapid growth.[51]

Testosterone has been used in the treatment of various psychoses with some success, as in cases of agitated depression,[52] atypical involutional psychoses,[53] male involutional psychoses,[54] and sexual psychopathy (homosexuality).[55] One patient with the diagnosis of schizophrenia associated with hypogonadism was treated with favorable results.[56] In some manner behavior problems in adolescence associated with hypogonadism[57] tend to disappear after physical superiorty has been improved with testosterone. However, better controlled studies, larger series of cases, and longer

peiods of observation are necessary before venturing to appraise this aspect of testosterone therapy.

Various dermatitides[58] including senile pruritis,[59] associated with senescence in males have responded to androgen therapy after other treatment had failed.

Androgen therapy has been tried in disorders of the vascular system with a modicum of success, as in essential hypertension, peripheral vascular disease, and in angina pectoris.[60]

Two patients with myotonia atrophica associated with testicular atrophy responded markedly to testosterone treatment, whereas a patient with no testicular involvement yielded no such gratifying results.

DISCUSSION

In order to obtain the optimum effects of therapy, and accurate diagnosis, use of the following criteria in evaluating hypogonadism is postulated: (1) The examination of the genital system; (2) the presence or absence of endocrine stigmata, such as abnormal voice, abnormal hair distribution, and abnormal fat distribution: (3) x-ray epiphyseal age; (4) anthropometric measurements; (5) the metabolism rate; (6) the assay of the androgen-estrogen ratio; (7) the blood, sodium and potassium values, and (8) an estimation of dietary deficiency due to different vitamin intake or metabolism.

In the present rampant enthusiasm for the administration of hormones in endocrine as well as non-endocrine disease, the endocrinologist must eliminate certain age-old empiricisms, before drawing any unbiased conclusions as to the effect of a specific therapy on a given individual. (1) In the majority of human ills there is a tendency to improve and the administration of any medicine will be followed by improvement. (2) Suggestive therapy, whether used deliberately or indirectly, is an important factor in therapeutics, and in the field of endocrinology, it is no less important. The arbitrary guides to treatment of an endocrinopathy are an established diagnosis, control of psychic factors, indications for substitution or stimulative therapy, acquaintance with the advantages and limitations of hormone therapy, a knowledge of the potency and dosage of hormones, subject to individualism and the possibility of anti-hormone effects. These principles should be adhered to in order to obtain the maximum benefits of endocrine therapy.

Some have warned against the use of testosterone therapy in growing persons on the ground that it may cause premature epiphyseal union and consequent dwarfing.[62] Administration of androgens to males with normal testicles may be harmful, decreasing the number of spermatozoa and ejaculating volume.[63] In the treatment of male involutional psychosis, untoward psychosomatic effects such as headaches, weakness, nausea, vomiting, vertigo, abdominal cramps, increased restlessness, diminished potency, masturbation, and agitation were noted.[64] Gynecomastia has been occasionally observed in males during a course of testosterone therapy, but this effect is transient and disappears after this hormone is discontinued.[65]

Females receiving androgen therapy in the menopause may develop the following untoward effects: hirsutism, deepening of the voice, and hypertrophy of the clitoris. The change in voice remains, though these other effects may regress if treatment is stopped. Acne,[67] weight gain and increased libido[68] are occasional and transitory effects in women. Increased libido may be marked in castrated women.[69]

In reiteration, the indications for the use of the male sex hormone are for substitution therapy in hypogonadism, (in which the testes are absent or cannot respond to stimulation as in cases of eunuchism), most cases of eunuchoidism, impotence due to testicular deficiency, and the male climacteric. It has a limited field of application in delayed puberty, cryptorchidism, behavior problems of adolescence associated with hypogonadism, benign hypertrophy of the prostrate, nymphomania, menopause, and psychoses associated with testicular deficiency. Androgenic therapy is contraindicated in sterility, azoöspermia, arteriosclerotic or hypertensive disease, in old men

in impotence not caused by testicular degeneration, and in hypogonadism in which the testes can respond to stimulation.

Again it must be emphasized that the indiscriminate use of this hormone may be attended by untoward symptoms and undesired clinical effects, which may not be reversible, even should treatment be stopped.

CONCLUSION

The work on the male sex hormone commands a huge literature, but the concepts are still indefinite and more study is needed in order to reconcile the large number of disconnected facts and theories with its fundamental precepts. Knowledge of the merits and limitations of this form of therapy, and caution concerning overly optimistic reports should be exercised before adopting the male sex hormone as a part of one's therapeutic armamentarium.

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LOUISIANA STATEWIDE SEROLOGIC EVALUATION SURVEY, 1942-1943

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Maintenance of high standards of laboratory performance is essential if the laboratory is to be of the maximum value to the physician in the diagnosis and control of disease. The establishment of training and experience requirements for laboratory directors and technicians has been effective in raising the level of laboratory performance in recent years, and despite the temporary difficulties introduced by increased wartime demand for such personnel, this improvement will in all likelihood continue.

The calibre of the performance of serodiagnostic tests for syphilis has, however, been found to vary to a great extent even in laboratories manned by well-trained and well qualified staffs and laboratory directors often find it difficult to determine how accurate are the results of their serologic tests. Inter-laboratory checks, through submission of a part of specimen to a neighboring laboratory, are sometimes made. However, if the results in the two laboratories are contradictory, it is usually not possible to determine which report is correct. Correlation of the laboratory report with the clinical findings is seldom of help in evaluating the performance of the test, inasmuch as at the present time the majority of patients first diagnosed as having syphilis are in the latent stage and corollary anamnetic, epidemiologic or clinical evidence of the disease is often not found.

The serologic evaluation survey has long been recognized as the best method of determining the reliability of serologic tests as

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performed in different laboratories. The early surveys were concerned with evaluation of the various modifications of the complement fixation and flocculation technics in the laboratories of their originators, and have provided excellent data on the sensitivity and specificity of these tests in the hands of the author serologists. It was found, however, that such surveys do not reflect the results obtained in actual practice. Technicians performing the same tests in different laboratories often obtain widely varying results. Another type of survey, therefore, was introduced in 1935 in which diagnostic laboratories were given the opportunity to check their technics on a carefully selected group of blood specimens against reliable control laboratories. Such studies at first evaluated only State Health Department laboratories, but in recent years intra-state evaluations of all laboratories desiring to participate have been carried out in a number of States. This last type of survey brings evaluation of serologic tests down to the level at which it is of value to the practicing physician and enables him to learn the reliability of the laboratory to which he submits his serologic specimens.

In response to requests from laboratory directors throughout the State, the Louisiana State Board of Health, in August, 1942, instituted the first serologic evaluation survey ever conducted in Louisiana. Dr. Reuben L. Kahn, Dr. Benjamin S. Kline, Dr. John A. Kolmer and Dr. William A. Hinton, authors of the tests bearing their names, agreed to serve as control laboratories. In addition, the Venereal Disease Research Laboratory of the U. S. Public Health Service at Stapleton, Staten Island, and the Johns Hopkins Hospital in Baltimore were used as controls. All laboratories in the State were invited to participate. All laboratories operating under the Department of Institutions and the State Board of Health and, in addition, all of the laboratories in military hospitals in the State expressed a desire to enter the survey. The response from private hospitals and laboratories was also gratifying.

For the private hospitals and laboratories participating, the survey was maintained completely confidential, through the use of code numbers. At the inauguration of the survey, numbered slips were made out and sealed by a clerk into small envelopes. These envelopes were then shuffled and one inserted into a larger envelope addressed to the director of each participating private laboratory. The reports of the results of tests in these laboratories were identified only by code number, so that even the author does not know the results obtained by the various private laboratories. All other laboratories reported by name. Each laboratory was asked to perform the test or tests which it used in its routine diagnostic work, and was provided with report forms and self-addressed envelopes, together with a letter of instructions.

Each Monday from five to eighteen identical serologic specimens were sent to each laboratory. These were approximately equally divided between specimens from non-syphilitic donors and from syphilitic patients under treatment or observation in the Isolation Hospital Venereal Disease Clinic in New Orleans. Most of the former were medical students from the Tulane or Louisiana State University Schools of Medicine and were paid $5.00 for the blood letting. To expedite the collection of the 5 c. c. blood samples, wooden racks provided with four rows of thirteen holes each were employed. In preparation for the blood letting, sterilized test tubes labeled with adhesive plaster bearing the same specimen number were inserted in these racks. The donor was placed in a recumbent position on an examining table and a 16 gauge needle, to which was attached a three-way stopcock was inserted without local anesthesia into an antecubital vein. The blood flowed from a short length of rubber tubing attached to the sidearm of the stopcock directly into the test tubes. In most cases the needed 250 c. c. of blood was obtained in three to five minutes. If the blood did not flow freely, it was aspirated by a 0 c. c. syringe attached to the central arm of the stopcock. One physician and one nurse

formed the blood letting team. After being allowed to stand at room temperature for approximately 20 minutes, the test tubes were refrigerated in the icebox for one to two hours before mailing. Cylindrical cardboard mailing tubes with metal bottom and screw top were employed to mail specimens. These were just large enough to permit the packing of not more than nine test tubes with cotton padding. Hemolysis of blood specimens was at first found to be a problem but thorough refrigeration and accelerated routing of the specimens practically eliminated this problem after the first four to five weeks.

Three hundred blood specimens, 150 from syphilitic patients and 150 from normal non-syphilitic individuals, were submitted to the six control laboratories and to the participating State laboratories from August, 1942, until March, 1943.

All laboratory directors were requested to report their findings as positive, doubtful or negative. When results were reported as 1, 2, 3 or 4 plus, these were translated to positive, doubtful or negative, in accord with the instructions of the author serologists.

After each block of 75 specimens was examined, a detailed tabulation was made of the results reported by each laboratory on each specimen, together with a brief clinical summary of the status of the donor. Separate tables were made for the syphilitic and non-syphilitic donors, and a copy sent to each participating laboratory together with a summary of the reports to date. Table I presents a portion of one of these tabulations.

At the completion of the survey, the performance of tests on the blood specimens submitted was evaluated in accordance with the standards set by the Committee on Evaluation of Serodiagnostic Tests for Syphilis. Sensitivity, which applies only to reports from syphilitic donors, is computed

TABLE I

PORTION OF DETAILED REPORT SUBMITTED AT INTERVALS TO PARTICIPATING LABORATORIES

LOUISIANA STATE-WIDE SEROLOGIC EVALUATION SURVEY
LOUISIANA STATE BOARD OF HEALTH 1942-1943
SERA FROM KNOWN CASES OF SYPHILIS

Patient Data						
Age		20	38	50	25	26
Sex		F	M	M	F	M
Color		W	C	C	C	C
Admission Diagnosis (1)		S*	EL	LL	CG	LL
Duration of Syphilitic Infection (2)		2m	9m	35	25	26
Number Arsenical Treatments		8	20	0	50	6
Number Heavy Metal Treatments		3	6	10	65	13
Blood Specimen Number		226	228	230	231	233
Control Laboratories	Test					
Dr. Wm. A. Hinton	Hinton	+	+	+	+	−
Johns Hopkins Hosp.	Eagle Floc.	+	+	+	+	±
Dr. John A. Kolmer	Kolmer	+	+	+	+	+
	Kahn	+	+	+	+	−
	Kline	+	+	+	+	−
	FINAL	+	+	+	+	±
Dr. Reuben Kahn	Kahn Stand.	+	+	+	+	−
	Kahn Pres.	+	+	+	+	+
Dr. B. S. Kline	Kline Diag.	+	+	+	+	−
	Kline Excl.	+	+	+	+	+
	Control Excl.	+	+	+	+	+
	FINAL	+	+	+	+	±

(1) S=secondary; EL=early latent; LL=late latent; CG=congenital; (2) Years unless specified; m=months; *=darkfield positive for T. pallidum.

TABLE II

THE SENSITIVITY AND SPECIFICITY OF SEROLOGIC TESTS FOR SYPHILIS EVALUATED IN THE LOUISIANA STATEWIDE SEROLOGIC EVALUATION SURVEY
TESTS WITH SPECIFICITY 99% OR ABOVE. IN ORDER OF SENSITIVITY

Laboratory Name or Code Number	Test	SENSITIVITY (percent) Sera from Non-Syphilitic Individuals	SPECIFICITY (percent) Sera from Known Cases of Syphilis
State Board of Health—New Orleans	Kolmer	90.2	99.7
#22	Kolmer	89.1	99.3
Control Laboratory—Dr. Reuben Kahn	Kahn Pres.	88.1	99.3
State Board of Health—Jennings	Kolmer	88.0	99.3
State Board of Health—Monroe	Kolmer	87.1	99.3
#25	Kahn	87.0	100.0
#25	Kolmer	86.9	100.0
Marine Hospital—New Orleans	Kolmer	86.7	100.0
Control Lab.—Dr. J. A. Mahoney, V. D. Res. Lab.	Kolmer	86.1	100.0
State Board of Health—Franklin	Kolmer	85.7	100.0
Camp Livingston	Kolmer	85.7	99.3
Control Laboratory—Dr. J. A. Kolmer	Kline	85.5	100.0
#26	Kline	85.5	99.7
Control Laboratory—Dr. J. A. Kolmer	Kolmer	85.2	100.0
#24	Laughlin	85.0	100.0
State Board of Health—New Orleans	Kahn	84.3	100.0
State Board of Health—Shreveport	Kolmer	82.6	100.0
Charity Hospital—New Orleans	Kline	78.5	99.7
Control Laboratory—Dr. B. S. Kline	Kline Diag.	77.7	100.0
Charity Hospital—New Orleans	Kolmer	77.4	100.0
State Board of Health—Alexandria	Kolmer	76.8	100.0
State Board of Health—Shreveport	Kahn	76.5	100.0
State Board of Health—Monroe	Kahn	76.4	99.0
#26	Kahn	75.7	99.7
#19	Kline	74.3	100.0
#34	Hinton	73.9	100.0
Charity Hospital—Shreveport	Kolmer	73.6	99.3
Charity Hospital—Pineville	Kolmer	73.6	100.0
Camp Livingston	Kahn	73.5	99.0
State Board of Health—Alexandria	Kahn	73.4	99.3
Control Laboratory—Dr. R. Kahn	Kahn Stan.	73.4	100.0
Control Lab.—Dr. J. A. Mahoney, V. D. Res. Lab.	Kahn	72.9	100.0
#19	Kahn	72.8	99.6
#11	Kahn	72.7	99.5
Lagarde Hospital—New Orleans	Kahn	72.1	99.6
Charity Hospital—Pineville	Kahn	71.2	100.0
Lagarde Hospital—New Orleans	Kolmer	71.2	99.6
#75	Kolmer .2	71.1	99.3
Flint-Goodridge Hospital—New Orleans	Kahn	70.9	100.0
#75	Kolmer .1	70.9	99.3
#34	Kline	70.4	100.0
LEVEL OF ACCEPTABLE SENSITIVITY			
Camp Claiborne	Kolmer	67.6	99.3
#16	Kahn	65.7	100.0
Marine Hospital—New Orleans	Kahn	63.1	100.0
Camp Claiborne	Kahn	62.2	100.0
#75	Kahn	62.1	99.3
Port of Embarkation—New Orleans	Kahn	61.9	100.0
Control Lab.—Dr. J. A. Kolmer	Kahn	59.8	100.0
#19	Kolmer	59.2	100.0
Camp Polk	Kahn	57.1	100.0
#13	Kolmer	55.2	99.6

by adding the percentage of positive reports to one-half the percentage of doubtful reports, and is considered satisfactory if within ten per cent of the sensitivity of the control laboratories. Specificity, which applies only to reports from non-syphilitic donors, and is computed by adding the percentage of negative reports to one-half the percentage of doubtful reports, must be 99 per cent or over to be considered acceptable. Evaluation was carried out only on the tests which were performed on 100 or more specimens from syphilitic patients and on 100 or more specimens from normal donors, since ratings based on a smaller number of examinations were not considered trustworthy. Anticomplementary reactions were not included in the tabulations.

Of the 49 laboratories in the State which participated in the survey, 12 did not examine a sufficient number of specimens to permit evaluation. These 12 laboratories either entered the survey late or were forced to withdraw before its completion.

Tables II and III present the sensitivity of tests performed on a number of specimens in the 37 test laboratories and six control laboratories completing the survey. Table II presents those tests with a specificity of 99 per cent or above, in descending order of sensitivity, Table III those with specificity of less than 99 per cent, in de-

TABLE III

THE SENSITIVITY AND SPECIFICITY OF SEROLOGIC TESTS FOR SYPHILIS EVALUATED IN THE LOUISIANA STATEWIDE SEROLOGIC EVALUATION SURVEY
TESTS WITH SPECIFICITY LESS THAN 99%. IN ORDER OF SPECIFICITY

Laboratory Name or Code Number	Test	SENSITIVITY (percent) Sera from Known Cases of Syphilis	SPECIFICITY (percent) Sera from Non-Syphilitic Individuals
Control Lab.—Dr. W. A. Hinton	Hinton	84.3	98.9
#1	Kahn	80.5	98.8
Contr. Lab.—Dr. J. A. Mahoney, V. D. Res. Lab.	Eagle Floc.	85.7	98.7
#14	Kolmer	87.9	98.6
Harding Field	Kahn	67.0	98.5
#15	Kolmer	73.0	98.4
State Board of Health—Franklin	Kahn	81.3	98.3
Control Lab.—Dr. B. S. Kline	Kline Excl.	92.0	98.3
Control Lab.—Dr. J. A. Mahoney, V. D. Res. Lab.	Mazzini	93.4	97.9
#22	Johns	84.4	97.9
#11	Kolmer	79.2	97.7
Charity Hospital—Lafayette	Kahn	75.0	97.9
Control Lab.—Johns Hopkins Hospital	Eagle Floc.	87.5	97.9
State Board of Health—Jennings	Kahn	77.8	97.6
Charity Hospital—Shreveport	Kahn	75.0	97.4
#20	Kahn	88.2	96.9
#14	Kline	81.4	96.9
#75	Hinton	74.8	96.8
#15	Kahn	71.6	96.8
Control Lab.—Dr. B. S. Kline	Kline Control Excl.	95.6	96.5
Flint-Goodridge Hospital—New Orleans	Wassermann	48.6	96.3
Charity Hospital—Lafayette	Johns	75.0	96.1
#13	But. Johns Tube	66.7	96.1
#28	Kolmer	68.7	95.5
Barksdale Field	Kahn	67.4	95.5
#20	Mazzini	88.6	85.2
#17	Kline	67.4	95.0
Charity Hospital—Shreveport	Kline	81.4	94.9
#28	Kahn	74.7	94.6
#27	But. Slide	48.6	93.2
Charity Hospital—Monroe	Kahn	73.7	89.7
#13	But. Johns Slide	80.0	89.6
Charity Hospital—Monroe	Kline	70.2	88.0

scending order of specificity. Calculation of the mean sensitivity of the control laboratories was necessary in order to determine the level of acceptable sensitivity in the test laboratories in accord with the recommendations of the Committee on Evaluation of Serodiagnostic Tests for Syphilis. The mean sensitivity of the control laboratory technics, excluding supersensitive tests, which achieved a specificiity of 99 per cent or over was found to be 77.7 per cent and therefore acceptable sensitivity in this survey was set at 67.7 per cent. The Kline diagnostic and Hinton tests in the Venereal Disease Research Laboratory were performed on a few less than the 100 syphilitic and 100 non-syphilitic specimens required and therefore do not appear in Tables II or III. However, these tests were included in calculating the mean control sensitivity. The horizontal line in Table II delineates the level of acceptable sensitivity.

Table IV indicates that just under half of the 71 tests evaluated were found acceptable, whereas more than a half of the 37 test laboratories had one or more acceptable tests.

TABLE IV

ACCEPTABLE TESTS BY TYPE OF LABORATORY

Type of Laboratory	No. of Participating Laboratories	Laboratories With 1 Or More Acceptable Tests		Number of Tests Evaluated	Acceptable Tests	
		Number	Percent		Number	Percent
State Board of Health	6	6	100	12	10	83
Charity Hospitals	5	5	60	11	5	45
Private Hosps. & Labs.	18	9	50	36	14	39
Military Hospitals	8	3	38	12	5	42
Totals	37	21	57	71	34	48

Of interest is comparison of the sensitivity of the diagnostic tests with acceptable specificity (Table II), with those with lower specificity (Table III). The mean sensitivity of the former is 75.3 per cent, of the latter 76.1 per cent. Virtual exclusion of false positive results, in the tests listed in Table II, is seen not to interfere with the attainment of a high level of sensitivity.

CONTINUATION OF SURVEY

Considerable interest was expressed by the Directors of the laboratories participating in this survey and a number of requests were received for a continuation of evaluation procedures. Therefore, beginning in April, 1943, a less intensive continuing survey was established in which each participating laboratory receives nine serologic specimens during the first week of each month. A number of laboratories which did not participate in the original survey are taking part in the continuing phase and in June, 1943, 47 test laboratories received blood specimens. The six control laboratories have graciously expressed their willingness to continue to serve in the present survey. It is planned to carry on the continuing phase of the survey as long as a desire for this is indicated.

APPROVAL OF LABORATORIES

Certificates of approval for the performance of serologic tests for syphilis have been granted in a number of States on the basis of results obtained in evaluation surveys. Such approval grants merited recognition to those laboratories performing acceptable tests and in addition provides for the practicing physician a knowledge of the reliability of the tests performed in the laboratory which he uses. It is therefore planned that certificates of approval shall be granted by the State Board of Health for those tests found acceptable in the laboratories throughout the State. The private laboratories will be requested to reveal their confidential code numbers so that approval may be granted to those with acceptable tests.

SUMMARY AND CONCLUSION

(1.) The first statewide serologic evaluation survey in the State of Louisiana was carried out from August, 1942, until March,

1943. Three hundred blood specimens were submitted to each participating laboratory.

(2) Thirty-seven laboratories performing 71 technics examined 100 or more specimens from syphilitic patients and 100 or more specimens from normal donors.

(3) Just under one-half of the tests performed were found acceptable by the standards set by the Committee on Evaluation of Serodiagnostic Tests for Syphilis.

(4) A continuing survey on a less intensive scale will be carried on indefinitely as a result of the interest expressed by the laboratory directors.

(5) Plans are underway for granting of certificates of approval for acceptable tests.

I am indebted to Dr. George M. Leiby, former Director of the Division of Preventive Medicine, for initiation of the survey; Dr. Owen F. Agee, Venereal Disease Control Officer, New Orleans, for drawing of the serologic specimens, and to Dr. George H. Hauser, Director of the Division of Laboratories, for advice and suggestions in the course of the survey.

CHAILLÉ ORATION*

JOHN A. BACON
NEW ORLEANS

Mr. Chairman, Members of the Orleans Parish Medical Society, and Guests:

In opening, may I say that I am deeply appreciative of the honor conferred upon me as one of those selected to speak on this "Stanford Chaillé Memorial Night." I am fully aware that I can in no way improve upon what has been said before by such able speakers as Dr. Ernest Lewis, Dr. Rudolph Matas, and others equally prominent, so I shall concentrate, more or less, upon another side of Dr. Chaillé's life, and tell a few of the many humorous incidents that occurred during my long association with him. Although to know him was to admire and revere him, there were many times when I was moved to laughter by his quick and ready wit.

It was on October 15, 1895, that I first met Dr. Chaillé, when I reported to him, as Dean of the Tulane Medical School, for duty. I had been given a position made vacant by the death of my predecessor. Among other things, I was advised by the Dean that my position would be of brief duration, six months only; that, positively, no loafers would be tolerated; and, finally, that he expected me to know unfailingly every professor, demonstrator, and instructor, as well as all medical students. Incidentally, there were about four hundred such students enrolled in the school at that time. I was then turned over to Mr. Belfield, better known to all students as "Oswald," who was to instruct me in my manifold duties. I immediately discovered that Oswald was a man of very few words, as he so clearly demonstrated on this occasion. His explanations were, to say the least, extremely brief. To sum up, these were my instructions from Mr. Belfield: "This is your office." That was all. No more, no less. The rest was up to me.

Dr. Chaillé deeply impressed me by his thoroughness to detail, by his brevity of speech (I often wondered if this was contagious and Mr. Belfield had contracted it), by his punctuality in all appointments, and by the manner in which he, by his own actions, always set the example for hard work for others to follow. Luckily for me, it was in the month of June, 1896, just when my position was about to terminate, that Dr. Chaillé reached the decision that the library should be made ready for student use by classifying, cataloging, and indexing all books therein. This necessitated further use of my services and thus I was assured of permanent employment. I may add here that Dr. Chaillé personally donated a large number of books to the library, as present records will readily show. The library at that time was not equipped with the modern conveniences available today; there were long wall-shelves full of books to which access was had only by ladder; and, although then 66 years of age, Dr. Chaillé daily would climb this ladder to classify books for cataloging and indexing. One day, in classifying the books, he came across one entitled: "Disease and Infirmities of Old Age." There was a mo-

*Delivered before the Orleans Parish Medical Society, December 16, 1943.

ment's pause as he silently glanced at the title as if in deep study. Then, with a rueful smirk, he remarked: "I don't know a damned thing about them, and I don't want to."

As an example of his thoroughness, I may cite the following incident: Dr. Alderman, who was then President of the University of North Carolina, had been invited by Dr. Chaillé to make the commencement address at the Medical School graduation exercises. This was the same gentleman who later became President of Tulane University, and subsequently of the University of Virginia. He was to be met at the station and escorted to the school by Alfred, the porter, a description of whom had been sent to Dr. Alderman by Dr. Chaillé. The latter's remarkable attention to detail was forcibly brought out, when, upon alighting from the train, Dr. Alderman spotted Alfred immediately and without the least difficulty. Walking up to the porter and tapping him on the shoulder, Dr. Alderman jokingly exclaimed: "So thorough was the description of you given by Dr. Chaillé, that I could have located you in the darkest recesses of Africa."

Dr. Chaillé was a man ever ready and willing to listen to what others had to say, and always open to conviction. This attitude of his is well brought out by the following case. Once he sent for the building contractor, a Confederate veteran by the name of Martin Costley, and gave him a pencilled sketch for some alterations and repairs to be made on Dr. Chaillé's home. Mr. Costley was to report back the probable cost of this work. The following day, however, the contractor returned with a plan of his own, which he claimed would give better results and cost less money than the one submitted by the doctor. Without any argument whatever, Dr. Chaillé's reply to the contractor was: "Go ahead and do it your way; it's only a fool who would listen to me."

During Dr. Chaillé's tenure as Dean, there were but three holidays in the Medical School, Christmas, New Year's Day, and Mardi Gras. Nevertheless, the majority of the students would go home for the Christmas holidays, even though school continued on. On New Year's eve, when Dr. Chaillé entered the lecture room to deliver his usual discourse on gross pathology, he was greeted with a tremendous ovation by the approximately twenty students who had faithfully remained at school. Their idea, of course, was that this tumultous reception would get them excused from the lecture-room; but they were sadly disappointed. They had reckoned without their instructor. When complete silence finally ensued, he simply and quietly remarked to them: "There is an old saying that when you have plenty of fun one day, you have very little the next. Judging from your enthusiasm, I am almost certain that the majority of you will be going up and down Canal Street tonight, tooting horns and wearing monkey hats. Now, all who want to leave this room, may do so; but I am going to hold this autopsy, and satisfy myself, at least, of what this man died."

I have stated previously that Dr. Chaillé was very punctual in his appointments. This applied in equal measure to business appointments, faculty meetings and lecture hours. Woe be to anyone who failed to keep an appointment with him, or who was not at a given place at the time specified. I believe Dr. Matas can readily testify to the truth of that statement.

I am sure all those who attended Medical School remember the special chair. Whenever a student applied for registration, he had to sit on a certain chair close by Dr. Chaillé's desk. This chair had a special arm upon which were to be placed all papers so that the sanctity of the Dean's desk would not be disturbed. Dreadful, indeed, was the fate of anyone who attempted to move that chair from its special position in the room. As soon as the student took his seat, the inquisition began. Sometimes it was exceedingly brief. The first question fired at the applicant as he seated himself was: "Have you the money?" A negative reply meant the immediate termination of the interview. For further information concerning these conferences, I sup-

pose former students would be a better source of knowledge.

Along with pathology, Dr. Chaillé also occupied the chair of hygiene in the Medical School. One of his pet questions in this branch of medical science was: "How would you build a sanitary privy?" One can well imagine the many amusing answers received. I happened to be monitor on the day when a certain student asked whether the doctor wanted a city or country privy built. Up the stairs I went and repeated to the doctor what the student wanted to know. Immediately came his reply: "Tell him to build both, but don't under any circumstances, build them so elaborate."

In his weekly quiz, the doctor always expected a direct reply to a direct question. Special emphasis was placed upon this fact as all students soon discovered. Whenever a silly answer was given, Dr. Chaillé would counter with this time-honored remark of his: "Don't think like a fool; and for God's sake, don't tell anyone Dr. Chaillé taught you such nonsense." It always produced results.

His straight-from-the-shoulder remarks at first contact always had a very sobering effect. For instance, in his opening address to the Freshman class, he would invariably say: "Some old-maid aunt said that you looked like a doctor, and that's why many of you are here; but always remember this —looks will never get you a diploma; it can only be acquired by hard work and constant study." The majority of them took his advice and acted accordingly.

In conclusion, I may truthfully say that his unflagging interest in the Medical School he loved so well, remained as great as ever when he was about to be retired; and he immediately began looking around for a suitable and worthy successor. The result of his endeavors was the appointment of Dr. Isadore Dyer, who so ably carried on where Dr. Chaillé left off.

Dr. Chaillé died May 27, 1911, and I felt as if I had lost a personal friend; for there is no doubt in my mind that whatever success I have attained in this world may well be attributed to my long contact with one who was a great man, a tireless worker, an able physician, an extraordinary lecturer, and finally above all, an ideal moulder of human character—Dr. Stanford Emerson Chaillé.

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THE LIMITATIONS OF MEDICAL EDUCATION IN WAR TIME*

J. H. MUSSER, M. D.
NEW ORLEANS

Education during war has undergone a profound, almost catastrophic upheaval. The training of the average student in the sciences and in the arts has come to an abrupt close with the introduction of draft regulations requiring the drafting of boys past the age of 18. This is the age when most young men are entering college. It is true that in the South they may enter somewhat earlier in their life but the average throughout the country is slightly under 18. In an effort to give a student a smattering of education, high schools and preparatory schools are accelerating and weakening their courses. A few younger men may have a year or two of work in college before they are selected for one or another of the special training courses of the United States Army or Navy or before they actually enter the service. If a man is selected for special training definite courses must be taken with virtually no election whatsoever, or at the best to a very limited extent. This means almost the complete abolition of eclectism. No man can be considered to have a rounded education unless he has the vision, the knowledge, and the training to appreciate that there are other points of view from that which he has been taught, that there are other diagnostic technics than those which he has learned or others may be right and still not agree with his personal views.

Now with the continuation of the war, training will adhere to one fixed road. There will be no deviation or detouring from the main concrete highway to the gravel side roads where knowledge may be obtained in

*Annual Alpha Omega Alpha address, Stars and Bars Chapter, Tulane University, December 17, 1943.

these byways which permit a man to be called educated. The student who is preparing himself for the study of medicine is obligated to take a certain number of scientific courses, the humanities and the arts must almost be neglected and at best this student will receive a minimum of such knowledge. The cultured physician is a person who has read some of the old masters; he knows something of the history of this and other nations; he has at least a reading knowledge of one or another foreign language. It is trite to remark that the cultured physician is the man of medicine who obtains a greater satisfaction in life and who usually accomplishes more than he who has adhered closely to medicine or a specialty of medicine and knows but a small part of that which is necessary in order to be educated in the broad sense of the term. He does know one thing, and probably he knows it well but his life at best is not full.

A comment aside—the practice of too highly specialized specialties often makes a man narrow and cramped in his outlook. He can see only his own limited field of a few acres and not the broad miles of diversified medical knowledge.

To return to our theme: The medical student of the future is going to enter the medical school then with only the rudiments of broad preparations; but fortunate indeed is this medical student as contrasted with other students of the professions in that at least his studies and his curricula are to be those of the pre-war student. It may be that a bit more will be presented to him having to do with matters militaristic but on the whole he can feel quite satisfied and happy that there has been no interference with his fundamental training for his future professional life. When you graduate, however, from the medical school, you and future war time students are going to suffer from an inadequate, incomplete and unsatisfactory intern training. Nine months is entirely too short a time for a person to observe and learn under guidance, even a year is too short a time because the average intern who serves a two year internship will get very much more out of his second year in the hospital than he will in the first year. Furthermore, under present war time conditions, staffs of hospitals are woefully depleted. The visiting men who man these hospitals are kept busy with the exigencies of the practice of medicine, often taking care of their own practice to the exclusion of their hospital duties. They have but little time to instruct, guide or lead the intern. However, the picture is not quite as blue as it is just painted. There are some bright and rosy spots on the canvas. An intern gets just about as much out of an internship as he puts into it and if the young medical neophyte will realize that self-education can be accomplished by industry and work, if he will study his cases carefully, if he will make use of library facilities and if he will work industriously at all times, even the so-called poorest internship will yield him definite and satisfactory results.

I have no quarrel with Procurement and Assignment but I am deeply and sincerely disappointed in the action they have taken relative to the restriction of internships in the larger hospitals, most of which have excellent teaching facilities or are primarily teaching institutions. The reasons for restriction of interns in these big institutions has been that many of the smaller hospitals might possibly have to close because of lack of staff, including interns. Procurement and Assignment feel that it is necessary to take care of the civilian population and that such care is best given in hospitals which are adequately manned. A shortage of physicians will obstruct the best medical care in the hospitals that are relatively small and have no university medical school connections. The intern is being called upon to take care of civilians. The fact that the internship is probably a part of the continuing education of the young practitioner-to-be has been forgotten, and this in spite of the fact that the medical advisory committee of Procurement and Assignment is composed almost entirely of teachers. It would seem that they have been over-ruled by their lay superiors because I cannot for a minute conceive of medical educators requiring men to serve internships in institutions that are not qualified to give the very

best instruction. Another unfortunate phase of this matter is that the very men who need most the best training will be the men who are not selected by the best institutions. Preference naturally is given the student who has made a good scholastic record and this student has proved by his industry and intelligence that he is in less need of continuing education than those in the low standing group of students. I wish that it would be possible and feasible, and I say this in spite of the fact that you are Alpha Omega Alpha students and leaders in your class, for hospitals where good training might be obtained, to select their men from the bottom of the list rather than from the top.

POSTWAR TRAINING

The enigma of future postwar graduate training is as yet unsolved. The young physician will come out of the Army or Navy, where he has probably done very little medical practice, anxious and desirous of continuing his education, refreshing his mind and possibly pursuing advanced studies for subsequent qualification by one or another of the specialty boards. There will be a tremendous demand by the returning medical officer for opportunities to re-educate himself and to continue his training. This problem is being discussed and is being given serious thought by educational bodies and by individual educators. The leaders of the armed forces are paying attention to this matter and amongst other things it is being suggested that medical officers be given six months' leave of absence with pay to attend refresher courses in medicine at various universities. As a matter of fact one man distinguished in the field of medical education suggested that after the war all teaching of undergraduates stop for one year and that the activities of the faculty be centered in re-burnishing the brains of the recent graduates. This of course is rather an absurdity.

Many of you are not going to be satisfied with such a six months' refresher course. Many of you will want to go into a specialty, the training for which will require from two to five years' graduate work. Most of this work, as you know, is through the agency of a residency in teaching hospitals. There will not be nearly enough residencies to meet the demand. The head of one department at Duke University has told me he is prepared to take just twice as many residents as he has in the past but even if this were done universally, the need still could not be met. Furthermore, the same man said that these residencies would not have the value that they had in the past, that they would be only 50 per cent as good as prior to Pearl Harbor. This is an important conception of what a great deal of graduate training for a time after the war will be. Maybe they will not be 50 per cent as good but at least in somewhat lower percentage figures and not comparable to those of the immediate past. I wish that I might be able to promise you all that you would have the opportunity of obtaining residencies in the future but I fear that I honestly cannot make such a statement. Your incomplete education is one of the penalties that you will have to pay for the activities of Hitler and the German war machine. In the period of reconstruction you will not be the only ones to suffer, as a matter of fact you as medical men will be much better off than will be the men in other scientific, economic or educational fields. At least you will have a profession back of you and a partial education, whereas in most of the other professions there is no opportunity available to master them.

In terminating my few remarks relative to your medical education and the education of the future medical student in the arts and sciences, let me take the opportunity to say that it is you, the leaders in your class and the leaders in classes elsewhere, the men and women of Alpha Omega Alpha, who must carry the torch of learning and of high standards in medical practice. You are a picked and selected group and it is on your shoulders that will fall responsibilities which will be demanding and which will require your unselfish devotion to your profession. Always if you do your best no more can or will be expected of you. Do try always to give the best that is in you and at all times, and remember that the master word is work.

NEW ORLEANS
Medical and Surgical Journal

Established 1844

Published by the Louisiana State Medical Society under the jurisdiction of the following named Journal Committee:

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SUBSCRIPTION TERMS: $3.00 per year in advance, postage paid, for the United States; $3.50 per year for all foreign countries belonging to the Postal Union.

News material for publication should be received not later than the eighteenth of the month preceding publication. Orders for reprints must be sent in duplicate when returning galley proof.

Manuscripts should be addressed to the Editor, 1430 Tulane Avenue, New Orleans, La.

THE JOURNAL *does not hold itself responsible for statements made by any contributor.*

THE NURSING SITUATION

In this time of stress, worry and generally upset conditions one is surprised if not shocked to know that the nursing profession is unwilling to accommodate itself to meet war-time situations and perplexities. It seems almost unbelievable that the nursing profession does not understand the difficulties this country is undergoing and which will become more and more critical. There is an acute shortage of nurses and yet these women are unwilling to do extra time even with additional pay. It is incomprehensible. Medical men are not working eight hours a day, their days are more likely to be sixteen to twenty hours. They are not refusing to take patients because they work only on an eight-hour basis but doing what they can for the sick and suffering.

When the nursing profession refuses to work extra hours it is the only profession in this country that has taken such a stand; even union members are willing to work overtime in order to produce war material and to keep war activities going.

The nursing profession (perhaps a more appropriate appellation would be nursing union) may realize when the post-war problems present themselves and the inevitable depression occurs that they have antagonized the medical profession and the citizenry as a whole. One of the rather remarkable developments in the City of New Orleans at least has been the acceptance by many people of the so-called practical nurse. They have been found willing to work overtime when the necessity arises. After the war nursing positions will be few and perhaps the experience during the depression of a decade ago may recur when, were it not for PWA, many of the nurses in the city would have literally starved. If a so-called nurse is found willing and capable, certainly in private home nursing at least, people would be willing to accept these nurses under conditions of illness which do not require a very highly specialized type of nursing.

POST-WAR MEDICAL TRAINING

The Army and the Navy medical educators and others are very much interested in the problem of post-war medical education. These groups all realize that men who have been in the service for two or more years and who have been on active combat duty will have need of refresher courses or some other form of training which will reburnish the medical mind professionally inactive for a period of many months or years. There is a large group of interns who have completed nine months of internship and who have gone into the

Army. These men definitely will need additional training. Their intern service has been too short adequately to prepare them for the practice of medicine and this group, together with the next group, those men who have had some experience in the hospital as residents, at best can be said to have a most incomplete course of instruction. In all justice to the interns who have had a short service or the resident who has not completed his residency, opportunity should be afforded to permit these men to continue with their basic training. With the accelerated courses and with the increase in the number of medical students it is going to be difficult to find a place for these men to have additional intern training or resident training.

There are still a few states that require twelve months' training as intern before the candidates for licensure are acceptable to the licensure bodies. In the great majority of the states, however, three months' credit has been given for service in the Army. Nevertheless a man who has graduated from a medical school feels that he should have the privilege of practicing in any state in which he elects to settle down and to carry on his profession.

It has been suggested by Dr. Soskin of Michael Reese Hospital as a partial solution of the problem that the men who had an opportunity of having hospital duty on completion of internship should be given residences at the large hospitals, those men who have been on field duty would be appointed as assistant residents. Residents who had not completed their preparation from the point of view of time spent in training should return to their residency so as to qualify themselves for the specialty boards. There should be supplied for residents who have had three years of training, postgraduate courses in medical schools or fellowships in such medical schools.

A marked increase in the residency staff would call for the expenditure of a considerable amount of money by the hospitals concerned. Housing, maintenance, salary for such a large group as it will be necessary to be taken on by those participating hospitals will bring about a very material increase in cost of maintaining the institutions. It may be that Governmental aid will help solve this problem. Continuation of training men whose college courses have been stopped abruptly and who have the proper academic qualifications definitely will be provided for by the Government. At the present time the plan seems to be to permit of from one to three years of additional collegiate and probably professional training with a small sum being paid to the trainee, plus the money for all his necessary expenses in whatever institution he may elect to enter. It is possible that this will be the solution of training of young medical officers whose training has been inadequate. Governmental aid to the young man himself plus a certain amount of aid to the hospitals and medical schools may be the solution of the problem.

The policy of the Navy in the future seems to be that they will accept no more limited service men. The jobs which these men could fill will be occupied by men who have been wounded in battle or who have been unable to stand the strain of campaigning. In the light of this declaration presumably many of the younger doctors will be given Naval hospital assignments in this country and thereby will have an opportunity of dealing with medical and surgical problems and qualifying themselves for their future professional life.

One of the great Foundations is preparing to subsidize a few men who have shown unusual promise and who have not been able to continue their residences. This Foundation feels that it would be advisable to select these men now so they they may know when they return to civilian life they will have a place provided for them where living expenses will be met and where training can be obtained.

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TREATMENT OF ESSENTIAL HYPERTENSION

Physicians, by and large, know that drug therapy for essential hypertension is notoriously unsatisfactory. Innumerable drugs have been recommended for the

treatment of high blood pressure without demonstrable cause and most of them have fallen by the wayside. In spite of this attrition there still remain a very large list of drugs and pharmaceuticals which are supposed to be "hypotensive" and valuable in the treatment of high blood pressure. The number of drugs used in the treatment of hypertension is a definite indication that no one of them is of particular value. If by chance this or that drug was found to be really effective, all the others would disappear like clouds after a storm. If there was a drug that could compare in efficacy to arsenic or bismuth in the treatment of syphilis, that drug would stand out like a beacon but unfortunately such is not the case. The iodides, the nitrites, the bromides, barbiturates, antispasmodic agents, such as atropine and papaverine have all been tested repeatedly and found wanting.

In addition to the studies that have been made in the past by others, Kapernick* has reviewed the subject and in a large group of patients with hypertension under experimental conditions and has studied the effect of various drugs that have been recommended for the treatment of arterial hypertension. These studies were made on a group of patients carefully selected and were free from any disease such as nephritis, coarctation of the aorta, endocrine disturbances or other causes, organic in nature, responsible for elevated blood pressure. Arteriosclerotic and obese patients, however, were included among the studied subjects. The patients were placed on a strict regimen, the details of which will not be recounted here. The drugs employed included theobromine and theobromine preparations combined with other drugs such as phenobarbital, aminophyllin, the barbiturates alone, the nitrites, together with certain proprietary preparations which contain such things as mistletoe, garlic and other unusual pharmaceutical preparations.

The author concluded from his study that the drugs specifically employed by him and others similar to them, when given continuously in ample dosage for a period of 30 days, failed to have any significant hypotensive effect on the blood pressure of patients with hypertension. Kapernick states that the ordering of these drugs is not to be recommended if the sole purpose is to reduce the blood pressure of a hypertensive patient.

It should be pointed out that an essential hypertensive person has often marked lability of the blood pressure which in certain instances might produce pseudo effects which are not true effects. It should be noted, further, that often symptomatic improvement may occur in the individuals who have symptoms apparently as result of their hypertension, but many do not have such symptoms. These may be controlled but the blood pressure remains unreduced. While symptomatic relief may be desirable and it is often easy to obtain, this does not minimize the fact that the mortality rate of this extremely common condition has not been reduced over a period of years. Kapernick rightly maintains that the symptoms associated with hypertension do not measure the factors which contribute to the death of these patients. On the contrary, elevated blood pressure is a most important contributory factor in the relatively early death of patients with hypertension. A Mayo group has found that the duration of life in the patient with essential hypertension which is classified as minimal is only 8.3 years from the time of the first examination and that in individuals with severe hypertension the duration of life after the first examination is but 5.4 months.

Most physicians have found that in the long run in their hypertensive individuals the exhibition of sedatives probably gives a greater degree of comfort and freedom from symptoms than do any of the drugs which are presumed to act on blood pres-

*Kapernick, John S.: The blood pressure in essential hypertension; effect of several reputedly hypotensive drugs, Am. Heart J., 26:610, 1943.

sure and to have a hypotensive effect. Certainly the barbiturates and the bromides cannot be accused of lowering the blood pressure but patients who take one or another type of sedative lead a relatively comfortable life, although their life expectancy is in no way altered by administering these preparations.

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ORGANIZATION SECTION

The Executive Committee dedicates this page to the members of the Louisiana State Medical Society, feeling that a proper discussion of salient issues will contribute to the understanding and fortification of our Society.

An informed profession should be a wise one.

SOCIALIZED MEDICINE

Since the question of state or socialized medicine has been ill-defined, I think it proper to define it before entering upon a discussion. The director of the Bureau of Medical Economics of the American Medical Association says, "The socialization of medicine, as the term is commonly used, refers to any form of medical service, diagnosis and treatment, provided, conducted, controlled or subsidized by the federal or any state government, with the exception of public health agencies, such as the U. S. Public Health Department, the Army, the Navy, and state institutions for the insane, tubercular, etc."

Everybody is entitled to know why the petitioner has reached the conclusion that it would not be wise to install that form of socialization in medicine in this country. I am glad of the opportunity to explain the reason underlying his decision.

I should like to show the effect state medicine would have on the physician in destroying his independence and initiative on research, on individual illness and public health, on the increase of morbidity and mortality rates, and that such a system would be inefficient, extravagant and wasteful, placing an extra burden on the taxpayer; and that it is only proposed for the benefit of the non-medically trained politician and job-hunter who have no fear of greater cost, increased taxes, political control or corruption.

I contend the effect of socialized medicine would be very detrimental to the individual doctor, for being human he might become content to live on any salary, however meagre. Under this plan he would not avail himself of necessary research and post-graduate work, allowing medical knowledge to retrograde, bringing back epidemics and suffering. It is well known that at the beginning of the present century American physicians felt they had to go to Europe for latest developments and most effective teaching of medicine. Today the United States is ahead of Europe with all its compulsory sick insurance. There was a greater amount of graduate medical education existing in the United States than in all the countries of Europe prior to the war. It is not felt that doctors would function best when *coerced* or *compelled under any system.*

Research would be discouraged if the time of the doctor is taken up with a great volume of political patients, a fact indicated by such experience in many countries; there would be less inducement for research because of lesser likelihood of advancement from private initiative and greater likelihood for advancement from political favoritism; and advancement in medical knowledge is thereby impeded.

There is no need for the large cumbersome program advocated by our proponents. There is *no need* for a great deal of any medical service today because of the stamping out of diphtheria, smallpox, typhoid and other scourges under the old plan. Disease prevention is neglected under a state system. Comparative death rates of the United States with European countries will show that the incidence of preventable disease is much lower in our country, as is infant mortality.

Socialized medicine would necessitate an unbearable rise in taxes and build a colossal organization of red tape and political corruption. Opponents and advocates of sickness insurance agree that good medical care costs between $20 and $30 per person annually. This must be raised by universal sales tax on wage workers, and is the type of tax that bears heaviest on those least able to pay it. A new fund of more than four billion dollars would be required of the taxpayers and added to his present load.

It is estimated that only 3 per cent of the population of the United States would be liable to illness during the year 1944. Many of these illnesses are so mild they would not require the $30 to treat them; some of them severe enough to multiply this sum many times. However, it can be depended upon that should there be $4,000,000,000 made available, it would be spent and wasted yearly.

It is evident that this plan is proposed and abetted by non-medically trained political persons and job hunters and that no system of medicine can survive without the active cooperation and encouragement of the medical profession. The practice of medicine has reached great heights of achievement because of the fact it has been unfettered by political control and has made marvelous progress toward conquering disease for the pure love of science and competition that exists among the doctors in finding out new means and methods to handle diseases.

It is an admitted fact that the system of medical care which has been arrived at in the United States is still far from being perfect, yet towers above that of those nations who have fallen into the chasm of state medicine. In the short period of 150 years in the United States, the number of years a man will live has been nearly doubled. The life expectancy of man was thirty-five, now it is sixty-two years.

American medicine gave the United States in the calendar year of 1943 the most favorable record in its 150 years' history. There was the highest general level of health and the lowest death rate ever known in the United States or for any equal number of people anywhere in the world. Comparison of vital statistics in Germany, England, and Italy readily show this to be true.

State medicine had an interesting origin in Germany and England. In 1883 Bismarck of Germany and in 1911 Lloyd George of Britain promised medical compensation and sick benefits to industrial workers in exchange for their support in the following election. The people didn't ask for it; the medical profession didn't recommend it.

State medicine would be the cure for Old Age Pensions, because with the return of disease, no one would live to be sixty years of age. It would settle the unemployment problem, as no one would reach twenty-one years if smallpox and diphtheria were allowed to run rampant around the nation again.

Other things that the practitioner takes exception to are the creation of a cumbersome red-tape mechanism with intrusion into the picture of an administrative office force supervising the doctor's methods of diagnosis and treatment, and dictating the remedies he uses.

The attempt to centralize in Washington the management of affairs that of right belong to the respective states is to create a system which inevitably destroys our democracy and betrays the fundamental principles of our government. If one constitutional right is abrogated by purchase or political pressure the others are not safe. In health matters this is particularly dangerous for in a very short time politics would have its finger on the wheel and inherent in politics are graft, stupidity, incompetence, intimidation and everywhere the suppression of individual enterprise and medical responsibility associated with a rapidly increasing tax rate. The inevitable rise in taxation must be emphasized for those who resent the present imposts. It is an accepted fact that when the government goes into any particular kind of business that business is operated with less ef-

ficiency and less economy than if it is run by private enterprise.

Regimentation of medical men under state control means unmistakably that the science of medicine is to be dragged in the gutter of political robbery at the behest of social theorists and sentimental perverts. Sentimentality has never been successful in preventing politics from making a mess of public affairs. Is it probable that sentimentalists, social theorists or salaried altruists will in any way obstruct contamination of medicine by political grafters even if their attention is arrested by it? "It will be a sad day for society," said President Wilson, "when the sentimentalists are encouraged to suggest all the measures that shall be taken for the benefit of the human race."

Furthermore, when federal and state governments undertake concurrent jurisdiction, the commonwealth practically surrenders its prerogatives and lets government dominate and perform those functions that are inherent and statutory to the State. Where the government has assisted, the government eventually controls. Also, when once a bureau is established it grows and expands and demands more and more from taxation. If once established in the practice of medicine it will emasculate efficiency and paralize progress.

State medicine cannot change human nature though it may alter relationships. Independence in medical practice is as essential to the happiness and prosperity of doctors and to the advance of scientific medicine as independence in citizenship is to the welfare of government, and this priceless independence gained by prodigious expenditure of blood and treasure should, under all circumstances, be sacredly preserved to the people of these United States.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR OF MEETINGS

March 1, Clinico-pathologic Conference, Charity Hospital Morgue Amphitheater, 1:30 p. m.
Clinico-pathologic Conference, Marine Hospital, 7:30 p. m.

March 2, Clinico-pathologic Conference, Touro Infirmary, 11:15 a. m. to 12:15 p. m.
Executive Committee, Baptist Hospital, 8 p. m.

March 6, The New Orleans Graduate Medical Assembly.

March 7, Eye, Ear, Nose and Throat Staff, 8 p.m.
The New Orleans Graduate Medical Assembly.

March 8, Touro Infirmary Staff, 8 p. m.
Women's Auxiliary, Orleans Parish Medical Society, Orleans Club, 3 p. m.
The New Orleans Graduate Medical Assembly.

March 9, Joint meeting, Orleans Parish Medical Society with The New Orleans Graduate Medical Assembly, 8 p. m.

March 13, Scientific Meeting, Orleans Parish Medical Society, 8 p. m.

March 15, Clinico-pathologic Conference, Charity Hospital Morgue Amphitheater, 1:30 p. m.
Clinico-pathologic Conference, Marine Hospital, 7:30 p. m.
Charity Hospital Surgical Staff, 8 p. m.
New Orleans Dental Association, 8 p. m.

March 16, Clinico-pathologic Conference, Touro Infirmary, 11:15 a. m. to 12:15 p. m.

March 17, I. C. R. R. Hospital Staff, 12:30 p. m.

March 20, Hotel Dieu Staff, 8 p. m.
Clinico-pathologic Conference, Baptist Hospital, 8 p. m.

March 21, Charity Hospital Medical Staff, 8 p. m.

March 22, French Hospital Staff, 8 p. m.

March 23, Clinico-pathologic Conference, Touro Infirmary, 11:15 a. m. to 12:15 p. m.

March 28, Baptist Hospital Staff, 8 p. m.

March 29, Clinico-pathologic Conference, Charity Hospital Morgue Amphitheater, 1:30 p. m.
Clinico-pathologic Conference, Marine Hospital, 7:30 p. m.

March 30, Clinico-pathologic Conference, Touro Infirmary, 11:15 a. m. to 12:15 p. m.

March 31, L. S. U. Faculty Club, 8 p. m.
New Orleans Hospital Dispensary for Women and Children Staff, 8 p. m.

During the month of February the Society held two meetings; the regular scientific meeting and a special scientific meeting. At the regular scien-

tific meeting a symposium on intentive methods of treatment of early syphilis was presented by Drs. Terrence E. Billings, Harry C. Knight and Owen F. Agee; Drs. M. T. Van Studdiford and V. M. Henington opened the discussion. At the special scientific meeting Dr. Frederick A. Coller, professor of surgery, University of Michigan, spoke on Carcinoma of the Rectum; Dr. Arthur W. Allen, lecturer in surgery, Harvard University and chief of the surgical service, Massachusetts general hospital, spoke on Gastric and Duobenal Ulcer; and Dr. Philip Wilson, clinical professor of orthopedic surgery, Columbia University, spoke on Care of Old Compound Fractures.

NEWS ITEMS

Dr. John H. Musser was recently elected to a ten-year term as trustee of the University of Pennsylvania. Trustees are elected by the Alumni Association.

I. M. Gage was recently promoted from lieutenant-colonel to colonel.

Maurice Lescale was recently promoted from captain to major.

Abe Golden was recently promoted from lieutenant to lieutenant-colonel.

At a recent meeting of the clinical staff of the Southern Baptist Hospital the following physicians were elected to office for 1944: Dr. Robert Sharp, chairman; Dr. Sam Hobson, vice-chairman; Dr. J. W. Reddoch, secretary; Dr. Jos. W. Wells, treasurer; Drs. E. H. Lawson, J. E. Bailey, Thos. B. Sellers and Robert Bernhard were elected to fill vacancies on the executive committee.

At a recent meeting of the Hotel Dieu staff, the following physicians were elected to office for 1944: Dr. Chaille Jamison, president; Dr. Frank Chetta, vice-president; Dr. J. Henry Larose, secretary-treasurer; Drs. J. M. Perret, H. T. Beacham, John S. Couret, Gilbert C. Anderson, Edmond Souchon, E. A. Socola, and Geo. J. Taquino, members of the executive committee.

Daniel J. Murphy, M. D., Secretary.

LOUISIANA STATE MEDICAL SOCIETY NEWS

CALENDAR

PARISH AND DISTRICT MEDICAL SOCIETY MEETINGS

Society	Date	Place
East Baton Rouge	Second Wednesday of every month	Baton Rouge
Morehouse	Second Tuesday of every month	Bastrop
Orleans	Second Monday of every month	New Orleans
Ouachita	First Thursday of every month	Monroe
Rapides	First Monday of every month	Alexandria
Sabine	First Wednesday of every month	
Second District	Third Thursday of every month	
Shreveport	First Tuesday of every month	Shreveport
Vernon	First Thursday of every month	

MOREHOUSE PARISH MEDICAL SOCIETY

At a recent meeting of the Morehouse Parish Medical Society the following officers were elected for 1944: President, Dr. E. L. Maddry, Bastrop; Vice-President, Dr. W. A. Rodgers, Bastrop; Secretary-Treasurer, Dr. B. J. Amoroso, Bastrop; Delegate, Dr. G. D. Williams, Mer Rouge.

ST. MARTIN PARISH MEDICAL SOCIETY

Following is a list of the new officers of the St. Martin Parish Medical Society. These officers will serve until January, 1945: President, Dr. L. A. Morrogh, Breaux Bridge; Secretary-Treasurer, Dr. L. Weinstein, Breaux Bridge; Delegate, Dr. S. D. Yongue, Breaux Bridge; Alternate, Dr. A. Corne, St. Martinville.

A MESSAGE TO MEMBERS OF THE AMERICAN MEDICAL ASSOCIATION

For some ten years the physicians of the United States have been subjected to a series of stresses such as have disturbed the orderly progress of medical science in no previous period of similar length. In 1860 Oliver Wendell Holmes wrote:

> "The truth is that medicine, professedly founded on observation, is as sensitive to outside influences, political, religious, philosophical, imaginative, as is the barometer to the changes of atmospheric density."

The depression of 1929, the evolution of the Social Security Act, the first Wagner bill, the development of hospitalization and medical care insurance, the enrollment of a third of the active medical profession in the armed forces, and now the Wagner-Murray-Dingell bill represents a se-

ries of provocative crises. Each of these challenges was met by the House of Delegates, the Trustees and the officers of the Association with clearly defined statements of policy which the Association has disseminated widely. Under these policies the extension of medical service has proceeded steadily and everything possible has been done to maintain the quality of medical education and medical service at the high standard that has been our ideal. The continued pressure of the years has been climaxed by the Beveridge report, the report of the National Resources Planning Board and the introduction of the Wagner-Murray-Dingell bill. This comes when every physician not in the armed forces is giving of himself unstintedly without thought of time or physical capacity.

Today strange social philosophies pervade the radio, the press and the periodicals. Panaceas for medical problems are proffered by innumerable prescribers. Some preach distrust of medical organization, cast doubt on the loyalty of our leaders, sow dissension in our membership! These activities are no doubt a reflection of anxieties and fears. And they appear at a time when a united, loyal, solidly organized medical profession is more needed than at any previous time in our history! When our representatives appear before legislative hearings they are entitled to the loyal, enthusiastic, unified support of the constituent and component societies of the American Medical Association.

In some areas there are attempts at reorganization of the county medical society on a strictly business basis; attempts are being made to organize small groups of the states into sectional cliques; before the House of Delegates of one state a delegate actually urged a united opposition to the Southern states; here and there physicians, apparently inspired by lay employees or by the urging of outside agencies, would pour the funds of county and state medical societies, swollen by special assessments, into "public relations," as if this were some new and potent magic; there are occasional demands that the medical profession "unionize" and affiliate with one or the other of the major labor organizations. The far-seeing Oliver Wendell Holmes was right: physicians are "sensitive to outside influences, political, religious, philosophical, imaginative."

Now what are the facts? The trend of public thought is quite definitely against any such expansion of the Social Security Act as the Wagner-Murray-Dingell bill contemplates. The Council on Medical Service and Public Relations has been organized, has developed a program, has stated its policies, has secured a full time secretary, has expanded sources of information on legislative activities, is participating in public relations for the Association. The Board of Trustees has organized for suitable representation at any hearings that may be called on legislation affecting the medical profession. The publications of the Association have reached the highest peak in their history in circulation and effectiveness. A poll proves that a majority of Americans interviewed consider the American Medical Association an organization interested in the advancement of medical science, an organization devoted to the approval of that in medicine which is sound and exposing that which is fraudulent—what the experts call a "favorable symbol." And all this accomplished at a time when the employees of the Association have been reduced by one-fourth by war activities or call to the armed forces, and when many others are likewise giving largely of their time to war activities.

The Board of Trustees pledge itself anew, as do the officers and employees of the Association, to do their utmost to carry out and to implement the principles, the policies and the mandates of the House of Delegates. To some 55,000 physicians who are in the armed forces the Board pledges all that the Association can do to maintain for them a medical profession free from the interference of political control. The Board is convinced that the House of Delegates will also do its utmost to hold the traditions of Americanism and American medicine inviolate until the physicians who are now with the armed forces return and themselves participate in determining the future of American medicine.

Board of Trustees: Roger I. Lee, M. D., Chairman; R. L. Sensenich, M. D., Vice-Chairman; Ernest E. Irons, M. D., Secretary; James R. Bloss, M. D.; E. L. Henderson, M. D.; William F. Braasch, M. D.; Edward M. Pallette, M. D.; Ralph A. Fenton, M. D.; Charles W. Roberts, M. D.

REACTIONS OF SOME MEMBERS OF CONGRESS TO THE SOCIALIZATION OF MEDICINE

The Bulletin of the Council on Medical Service and Public Relations, published by the American Medical Association, has sent out some quotations from letters of various Congressmen. It is to be noted that none of the Louisiana Congressmen are included in this list. It would be interesting if the members of the Louisiana State Medical Society have heard from their Congressmen to send their Congressional expressions of opinion about the Wagner-Murray Bill to the New Orleans Medical and Surgical Journal for publication. Even more important should be the attempt to have an expression of opinion from the Congressman of your district.

Congressman John C. Kunkel, Pennsylvania: "Personally, my own view is that the doctors should go out and explain the dangers of this bill to their patients. It is easy enough for them to sit back in their easy chairs and write to their Representatives in Congress but if they expect

to awaken public opinion to the difficulties which will arise, not only for the medical profession but also for the people for whom they care, then it is necessary for them to do something to create public opposition to the bill and a better understanding of it. It is perfectly obvious that this is a New Deal measure and it will have the support of the movies, the New Deal measure and most of the radio commentators, so the doctors start in with a tough job and the only way they can hope to win permanent success is by informing the public in conversations and in talking to their patients. I have told a number of doctors back home exactly the same thing."

Congressman Louis E. Miller, Missouri: "In my judgment this bill proposes to completely socialize medicine and make the members of the profession mere wards of the Government. In addition, I think it proper to state that the bill could control medical education and the medical schools of the country.

"The vicious implications of the bill are so far reaching that they should be brought to the attention of every member of the medical profession and a concerted effort should be made to defeat it. I shall oppose the passage of the bill with every resource at my command."

Congressman Henry C. Dworshak, Idaho: "I have received numerous letters from doctors concerning this proposed legislation, and it is apparent that there is almost unanimous opinion that it would be unwise to foster such revisions in our social security system at this time.

"You probably are aware that throughout my Congressional career, I have actively opposed all efforts to socialize our country or our people. I believe that we must insure the provisions of our free enterprise system, and make it possible for Americans to enjoy not only the safeguards under our Constitution, but likewise to have an opportunity to make individual progress commensurate with each individual's ambition and ability.

"It is not likely that this bill will be presented to the House for action in the near future. I assure you, however, that I shall keep in mind your views, and that I shall carefully scrutinize any legislation similar to S. 1161."

Congressman Lyle H. Boren, Oklahoma: "I am unalterably opposed to socialized medicine in any of its forms or anything tending that way. I was mighty glad to hear from you and receive your views."

Congressman Sam Hobbs, Alabama: "Thank you for your letter of the 15th concerning the Wagner Bill which you understand would have the effect of socializing medicine.

"I realize the tragedy of such a situation if this Bill would accomplish it, and assure you it will be most carefully studied in the light of your opposition. I appreciate your letter."

Congressman N. M. Mason, Illinois: "I am glad to inform you that I am opposed to the socialization of medicine and hospital care, and therefore shall oppose these bills when they come before the Congress for consideration."

Congressman Fred A. Hartley, Jr., New Jersey: "In response to your letter, I wish to advise you that I am opposed to socialized medicine, and shall do all I can to prevent the passage of S. 1161."

Congressman James C. Auchincloss, New Jersey: "I am opposed to this measure (S. 1161), and am on record to that effect. As the bill is at present drawn up, I will vote against it should it be brought to the House for action."

Congressman Harry L. Towe, New Jersey: "Thanks for your letter of October 25 in opposition to S. 1161.

"I believe that it would be unwise to enact legislation of this character and I intend to vote against it."

—From the Bulletin of the Council on Judicial Service and Public Relations, published by the American Medical Association.

THE IVY DAY PROGRAM

The Senior class of Tulane University Medical School celebrated Ivy Day on February 10, the Ivy Day address being given by Dr. Leon J. Menville, Professor of Radiology.

The graduating class presented as a gift to the medical school new lighting fixtures for the uptown library.

The Walter Reed Memorial Medal which is given by the Louisiana State Medical Society, was presented to Dr. Harold A. Ferris for his thesis on "Modern Concepts of the Epidemiology of Yellow Fever," by Dr. H. W. Kostmayer in the absence of Dr. deGravelles who, at the last minute, found he would be unable to be present to make this award.

The Isadore Dyer Memorial Prize for Medical Scholarship was won by Dr. Maridel Saunders.

The Sidney K. Simon Prize was given to Dr. Robert S. Picard. The award for the best thesis presented to the Department of Medicine was divided between Dr. Norman W. Todd and Dr. Henry Laurens, Jr.

The president of the class, Dr. Broox C. Garrett, gave a short talk and the ivy was planted by Dr. John Laurens and Dr. E. W. Carrigan.

TULANE MEDICAL SCHOOL GRADUATION

Commencement exercises for the School of Medicine were held in McAllister Auditorium on Saturday morning, February 12. For the first time in many years the graduation exercises were held for the School of Medicine alone.

The commencement address was delivered by Dr. Lewis H. Weed, director of the School of Medicine, the Johns Hopkins University.

Commissions were awarded to a large number of men in the Army Medical Corps by Captain

George Allen Burgess, M. C., A. U. S., and in the Navy by Captain Forrest U. Lake, U. S. N. (Retired), commanding Tulane Naval unit. Diplomas were presented by Dean Kostmayer.

ANNUAL CONGRESS ON MEDICAL EDUCATION AND DEFENSE

The meeting was held in Chicago on February 14-15. An entire morning session was devoted to problems of post-war medical education. The second session was given over to wartime problems in medicine and medical education, in which Major General Lull, Vice-Admiral Ross T. McIntire and Surgeon General Parran participated.

The Federation of State Medical Boards held a dinner Monday evening. The following day the meeting paid attention very largely to the subject of medical licensure and its wartime implications.

MEDICAL CONFERENCES

There were five important conferences held in Chicago at the Palmer House on February 12-16, as follows: Midwinter Conference on Pre-Paid Medical Service, National Conference on Medical Service, Annual Congress on Medical Education, Annual Congress on Industrial Health, and the Federation of State Medical Boards. This was a very intensive and well attended meeting with wonderful programs on vital present-day subjects which are now facing the medical profession.

Attending these meetings were Dr. B. I. Burns, Dean of Louisiana State University Medical School; Dr. H. W. Kostmayer, Dean of Tulane University Medical School; Dr. John H. Musser, member of the Council of Medical Education of the American Medical Association; Dr. Roy B. Harrison, Secretary of the Louisiana State Board of Medical Examiners, and past president of the Federation of Boards. Dr. Guy Caldwell was also in Chicago at the same time attending the American Board of Orthopedic Surgeons. Dr. P. T. Talbot, secretary-treasurer of the Louisiana State Medical Society, also attended the above conferences.

TOURO INFIRMARY

The regular meeting of the medical staff of Turo Infirmary was held on Wednesday, February 9 at 8 p. m. The following program was presented: Clinico-Pathologic conference by the Department of Pathology, with a clinical discussion by Dr. P. J. Kahle; Small Intestine Changes Associated with Chronic Bacterial Dysenteries by Drs. D. N. Silverman and Alan Leslie; Resuscitation of Babies Delivered by Cesarian Section by Dr. J. D. Russ.

CHARITY HOSPITAL

A meeting of the Medical Division of the Charity Hospital Visiting Staff was held on Tuesday, February 15 at 8 p. m., in the auditorium of the hospital. The following program was presented: Case Report by Dr. W. A. Sodeman; Case Report by Dr. Byron M. Stuart; Case of Weil's Disease Treated with Penicillin by Dr. L. Friedman.

DR. RAMON CASTROVIEJO

Dr. Ramon Castroviejo, distinguished member of the staff of the Institute of Ophthalmology of Columbia-Presbyterian Medical Center, New York, was a guest of Dr. Wm. B. Clark, head of the Department of Ophthalmology of Tulane University, on January 11, 1944. He was the guest of honor at a dinner held at the St. Charles Hotel under the auspices of the leading ophthalmologists of the city, with forty representatives of the specialty in attendance. Following the dinner, Dr. Castroviejo delivered a lecture on "Modern Trends in Ophthalmic Surgery," to a large representative audience at the Auditorium of the Charity Hospital. The lecture was beautifully illustrated by a series of moving pictures of Dr. Castroviejo's original operations. Of particular interest were his pictures of the operation of keratoplasty or corneal grafting — one of the greatest contributions of surgery for the cure of corneal blindness—which he has done so much to perfect.

After the meeting, Dr. Castroviejo visited the LaGarde Army Hospital to see the war-wounded eye patients by invitation of the staff. During his brief visit, Dr. Castroviejo was entertained by Dr. Matas and many admiring colleagues and friends.

INFECTIOUS DISEASES IN LOUISIANA

The Louisiana State Board of Health reported for the week ending January 1 an astonishingly large number of influenza cases, 4,136 as contrasted with the previous four weeks of 326. Other diseases in double figures reported in this week included 979 cases of syphilis, 826 of gonorrhea, 49 of chancroid, 28 of other forms of tuberculosis, and 27 of pulmonary tuberculosis, 15 of pneumococcic pneumonia.

Amongst "other diseases" there were also listed 62 cases of unclassified pneumonia. The following week still showed there was an active epidemic of influenza throughout the state, 4,206 were listed. This was followed by 37 cases of hookworm infestation, 27 of pulmonary tuberculosis, 16 of pneumococcic pneumonia, and 12 of other forms of tuberculosis. There were also listed under "other diseases" 43 cases of unclassified pneumonia.

The following week showed that the influenza epidemic had reached its peak, there being 6,429 cases listed, followed by 84 cases of unclassified hookworm infestation, 27 of pulmonary tuberculosis, 21 of pneumococcic pneumonia, 19 of septic sore throat, 15 of other forms of tuberculosis,

17 of meningococcus meningitis, 11 of cancer, and 10 of chickenpox. The large number of meningitis cases came for the most part from Orleans Parish with 12 such cases, followed by three from Jefferson Parish. There was a reduction in the number of cases of influenza for the week ending January 22, with 5,603 cases being recorded. There were also 27 cases of unclassified pneumonia, 19 of tuberculosis and of measles, 12 of hookworm and 11 of chicknpox.

Thre was a still further reduction in the instance of influenza, 1,990 cases being listed, followed by 37 of septic sore throat, 32 each of pulmonary tuberculosis and of measles, 20 each of mumps and pneumococcic pneumonia, 13 of chickenpox, and 12 of miscellaneous forms of tuberculosis, plus 10 additional cases of meningococcus meningitis, all of the cases coming from Orleans except a few scattered incidences in other parishes. The week ending February 5 found 1,266 cases of influenza reported this week for a total slightly under 20,000 for the year 1944. This gives some indication of the widespread epidemic that has been present the first part of this year. There were listed also 37 cases of unclassified pneumonia and 24 of pneumococcic pneumonia. Twenty-nine cases of pulmonary tuberculosis were discovered this week, followed in frequency with 21 cases of measles, 18 of mumps, 17 of chickenpox, 13 of diphtheria, 11 of meningitis, and 10 of scarlet fever. This week also included the combined total of venereal diseases for the four-week period. In this time there were found to be 1,449 cases of gonorrhea, 1,287 of syphils, 113 of chancroid, and 25 of lymphopathia venereum.

HEALTH OF NEW ORLEANS

The Bureau of the Census, Department of Commerce, reported that for the week which came to a close on January 15, there occurred 201 deaths in New Orleans as contrasted with 186 the previous week. One hundred and thirty-nine of these were white, 62 were in the colored population, and there were 10 infant deaths, divided equally between the two races.

The following week which terminated January 22, 194 people died in New Orleans of whom 130 were white and 64 were colored, and 12 were children under one year of age. The succeeding week there was quite a smart decrease in the number of deaths, 172 people dying in the city, divided 113 white, 59 colored, 20 were children under one year of age. The next week the deaths were up in number, totaling 203. Of the people dying in New Orleans 154 were white and 49 were colored, with a rather remarkable total of 31 deaths of children under one year of age, 20 of these children being colored.

The death rate for the first part of 1944 has been very much higher than in the past. For example, in this particular week, the three-year average has been 151 and the previous week 163. There was a reduction in the number of deaths in the week ending February 12, this time to figures more closely approximating the average. One hundred and forty-six people expired in the City of New Orleans, 97 of whom were white and 49 of whom were negroes. There were 11 infants under one year of age in this group.

DR. MILLARD REID PURNELL
(1869-1943)

Dr. Millard R. Purnell of Shreveport was born in 1869 and graduated in medicine from the Memphis Hospital Medical College in 1891. Dr. Purnell was a medical examiner for the city induction center, and died in Shreveport on December 6. 1943.

DR. JOSEPH W. MURPHY
(1877-1943)

Dr. Joseph W. Murphy of Monroe, was born in 1877, and graduated from the University of Nashville in 1908. Dr. Murphy was on the staffs of the E. A. Conway Memorial Hospital and the St. Francis' Sanitarium. He died in Monroe on December 9, 1943.

DR. CLARENCE J. WICHSER
(1891-1944)

Dr. Clarence J. Wichser of New Orleans was born in New Orleans in 1891. He graduated in Medicine from Tulane University in 1920 and had practiced in New Orleans continuously since then. Since 1930 he had been physician for the sewerage and water board. He was an active member of many fraternal organizations in New Orleans as well as many medical organizations. He died on January 25, 1944. Dr. Wichser is survived by his widow, three daughters and two sons.

DR. FRANKLIN V. BOYD
(1879-1944)

Dr. Franklin V. Boyd of Opelousas, was born in Morgan City, La., in 1879. He received his medical degree from Tulane University in 1902. He first practiced in Texas. Later he moved to Lafayette and then to Basile. He accepted the position of health director in Lake Providence in 1934 and in 1936 was transferred to Opelousas to head the St. Landry unit. At the time of his death on January 30, 1944, Dr. Boyd was secretary-treasurer of the St. Landry Parish Medical Society. He is survived by his widow and three sons.

DR. THOMAS STARK
(1865-1944)

One of the most well known members of the State Medical Society expired in Thibodaux, February 10, at the age of 78. Dr. Thomas

Stark was not only a prominent physician and a most active one, but also he was a civic leader in his home town. At various times he served as coroner and on the school board. He ultimately became president of the parish local board. His vocation was medicine but his avocation was politics. He had great political influence throughout south Louisiana.

DR. A. M. CHARLET
(1870-1944)

Dr. A. M. Charlet of Belle Alliance was born in 1870, graduated in medicine from Tulane University in 1891. Dr. Charlet died on February 11, 1944.

WOMAN'S AUXILIARY

ORLEANS PARISH

OFFICERS FOR THE YEAR 1944

President	Mrs. John Dunn
1st Vice Pres.	Mrs. J. Kelly Stone
2nd Vice Pres.	Mrs. Daniel N. Silverman
3rd Vice Pres.	Mrs. Edmond Souchon
4th Vice Pres.	Mrs. Earle Brown
Recording Secretary	Mrs. Lloyd Kuhn
Corresponding Sec.	Mrs. H. F. Brewster
Treasurer	Mrs. Jonas Rosenthal
Parlimentarian	Mrs. Daniel J. Murphy
Historian	Mrs. William Kohlman
Publicity	Mrs. Jerome Landry

Chairmen of Standing Committees:

Program	Mrs. Agnees Mogabgab
Public relations	Mrs. Jules M. Davidson
Red Cross	Mrs. Edmond Souchon
Registrations	Mrs. George Taquino
Samples	Mrs. Daniel N. Silverman
Telephone	Mrs. Louis Leggio
Tuberculosis	Mrs. Kelly Stone
Cancer	Mrs. Edwin Socola
Clothes	Mrs. Carroll Gelbke
Commemoration	Mrs. Aynaud Hebert
Community Chest	Mrs. N. H. Polmer
Contact	Mrs. Fred Fenno
Courtesy	Mrs. Theodore Simon
Defense	Mrs. E. A. Fatter
Hostess	Mrs. Cassius Peacock
Membership	Mrs. Monte Meyers
Motor corps	Mrs. M. Earle Brown
Notifications	Mrs. C. Grenes Cole
Periodic health	Mrs. Paul G. Lacroix
Printing & supplies	Mrs. J. Bailey

On Wednesday, January 12, the regular monthly meeting was held at the Orleans Club on St. Charles Avenue with the following members and guests present:

Mesdames Agnees Mogabgab, J. W. Fanz, Donovan C. Browne, H. F. Brewster, Cassius L. Peacock, R. N. Penick, Jules M. Davidson, John S. Dunn, W. C. Rivenbark, L. Burt, E. Harris, Samuel A. Romano, Joe Wells, Waldemar Metz, N. H. Polmer, S. Salimon, Jr., H. Greenberg, E. S. Phillys, George Taquino, W. A. Gillaspie, W. R. Buffington, S. M. Blackshear, J. E. Bailey, O. Joachim, Wm. Kohlmann, D. N. Silverman, Joseph J. Ciolino, A. J. Tomassi, Clarence Parent, Wm. J. Rein, M. Earl Brown, Jerome Landry, Arthur B. Brown, H. Theodore Simon, F. J. MacPherson, Rawley Penick, Louis Leggio, J. Minderman, E. A. Fatter, J. Kelly Stone, C. Greenes Cole, Monte F. Meyers, Walter C. Hava, Edwin Socola, Aynaud H. Hebert, Roy B. Harrison, Tracy Gatley, J. W. Townsend, Hermann Gessner, Edgar Arbour and Miss Leona Wallbillich.

Hostesses for the evening were: Mesdames John Dunn, J. Kelly Stone, Dan Silverman, Edmond Souchon, M. Earl Brown, Lloyd Kuhn, Jonas Rosenthal, H. F. Brewster, Dan Murphy, Jerome Landry, William Kohlmann, all are members of the board.

Following the meeting tea was served. Mrs. Kelly Stone and Mrs. Dan Silverman presided at the tea table.

Dr. Edwin Zander, the newly-elected president of the Orleans Parish Medical Society was the guest speaker of the evening.

Miss Jesse Tharp entertained the group with a play "The Miracle of the Danube" by Maxwell Anderson.

The program was concluded by Mrs. Walter Hava playing the Star Spangled Banner.

ANNUAL REPORT OF THE WOMAN'S AUXILIARY TO THE ORLEANS PARISH MEDICAL SOCIETY

Due to the sincere friendliness and cooperation of my executive board and committees, this has been a short and sweet year. It seems as though the installation was only yesterday.

These twelve months, as your president, have passed so swiftly and pleasantly that I can hardly realize it is time to give to you my annual report.

On December 9, 1942, my first honor was to present to our retiring president, Mrs. Paul G. Lacroix the Auxiliary's official pin.

Our vice presidents, each have the responsibility of a chairmanship and have fulfilled their duties faithfully.

Mrs. Edwin Socola, as recording secretary, has kept excellent minutes of all board and regular meetings.

Mrs. Jerome Landry, our treasurer, has kept her accounts in perfect order leaving $170.93 in the checking account and $603.93 in savings account. Frozen account $170.83. Interest $12.53. Total $774.89.

We have two defense bonds of $100 each in the safe of Orleans Parish Medical Society. No outstanding bills.

Mrs. Daniel Murphy, corresponding secretary, took care of all correspondence, including eleven

invitations sent to commanding officers in various branches of government service inviting doctors' wives to our meetings.

Mrs. Otto Joachim, our parliamentarian, has kept me on the right path and gave to the commemoration fund a bond.

Mrs. Carroll Gelbke, our historian, has been very busy this year, you will agree, when you take a look through our history book. It speaks for itself.

Mrs. William Kohlmann, publicity chairman, sent notices to both papers and really gave us full share of publicity throughout the year.

To Mrs. Theodore Simon, our program chairman, much credit is due for the entertainment and programs which are listed below:

(1) *January* we had Mrs. Hilda Phelps Hammond's discussion on "Homer Lee's Prophecy."

(2) *February* Mrs. Benjamin Yancey presented an interesting talk, "Why Peace Plans Now."

(3) The *March* program was unusual—Mr. Robert Wauschope talked on American cities and modern Indians in Middle America, showing pictures taken by himself.

(4) Mrs. James Fortier described "The Vieux Carre" at our April meeting.

(5) A book review in *May*, by Mrs. Alexander Donovan entitled "The Valley of Decision."

(6) *October* we were entertained by Mrs. C. C. Henson, with a review of "Roughly Speaking."

(7) *November* we had Dr. Daniel Murphy who gave us a very fine talk on the Murray bill—and we also had a talk on "The Balkans" by Mrs. Hilda Phelps Hammond.

(8) *December* or today's meeting we will have Mrs. Henry Hartmann—"A Tree Grows in Brooklyn."

Mrs. James Warren, chairman of hostesses, has arranged and planned all of our delightful teas, selected hostesses, calling on each member to serve once during the year.

Membership chairman, Mrs. Aynaud Hebert secured eight new members, a most excellent record during these times.

The notification cards for all board and regular meetings have been sent out regularly by Mrs. Charles Odom totaling 2200 cards, for which she deserves many thanks.

Our telephone chairman, Mrs. Brierre, assisted by Mrs. E. A. Fatter, have given excellent service.

Mrs. Paul Lacroix, our past president, and registration chairman, with her capable committee, has registered and issued name cards at all meetings.

Courtesy chairman, Mrs. Roy B. Harrison, has made many visits to prospective members, sick doctors and their families and other members throughout the year, and regrets that gasoline rationing slowed her down a bit.

Mrs. Edmond Souchon was ready and willing to serve at all times.

Periodic health chairman, Mrs. William Harris, reports 300 cards sent to members for health examination.

Red Cross—Mrs. John Dunn, who is also our president-elect, has devoted every Friday at Red Cross headquarters representing our auxiliary and reports seventy-five auxiliary workers whose total hours were eleven thousand plus—that included blood bank, cutting and making bandages, motor corps, canteen service, first-aid and home nursing, truly a marvelous report.

Mrs. Waldemar Metz, cancer chairman, also woman's field Army chairman, whose report shows excellent work, her committees included many auxiliary members whose help in the drive produced nearly three thousand dollars. Many bandages made for patients not hospitalized.

Mrs. T. T. Gately, tuberculosis chairman, has a team of twenty-four auxiliary members to work starting December 13 to December 18—booth at the St. Charles Hotel.

Mrs. Jonas Rosenthal was ever ready to help with the collection and distribution of clothes, if needed.

Samples were collected by Mrs. H. B. Alsobrook, several hundred being distributed to "Little Sisters of the Poor" and "Home for Incurables."

Public relations chairman was Mrs. George Taquino, our state president, who attended all meetings on health, Red Cross, defense projects and professional meeting on Wagner-Murray bill.

Our contact chairman, Mrs. C. Grenes Cole, was my shoulder on which to lean and has always been more than ready to do her part. Good old Halet.

The commemoration chairmanship was under the guidance of Mrs. Jules M. Davidson and the report was most gratifying, having helped two indigent widows to the amount of $390. We received $159.50 in cash and a $100 bond.

Community Chest under one of our capable chairmen, Mrs. Theodore Simon, reports $485 raised during the drive.

Printing and supplies were taken care of by Mrs. Anees Mogabgab.

Always on hand to sell bonds and stamps was Mrs. Herman Gessner. With the help of Mrs. Taquino they sold twenty-seven thousand nine hundred dollars ($27,900) of bonds and twenty-one dollars and ten cents of stamps.

It has been our pleasure this year to have entertained the wives of doctors in service at each meeting, also to have had the Dental Auxiliary members for our April meeting and our mothers in May. Corsages were given to our mothers.

We celebrated Doctors' Day, March 30, with a donation of $25 to the indigent widow's fund. The philanthropic activities have been very creditable.

Thirty dollars ($30) each month were divided between case one and case two—twenty-five dol-

lars to cancer control, twenty-five dollars to tuberculosis and ten dollars to state indigent widow's fund. Books to victory book campaign for soldiers —pillows for O. C. D. Renewal of magazine subscription to La Garde Hospital recreation library and a Christmas present to each of our indigent widows.

Thanks to Doctor Alsobrook for giving us a fine talk at our January meeting and to graduate medical assembly for inviting us to be hostesses at their tea given for visiting wives.

We are very grateful to Baton Rouge Auxiliary for entertaining us so graciously during the state meeting in May, where I gave our annual report.

I wish to thank Doctor George Taquino, our contact chairman and members of the medical society for their hearty cooperation and for the use of the board room and their many other courtesies; Mrs. Born and the personnel of the Orleans Club for use of their board room and their untiring efforts to make our meeting and teas so pleasant.

And now I come to that which will always be dear to me. The cooperation and loyal support given to me by the board which has made my term as president just one grand pleasure from beginning to end. It has been an honor and a great pleasure to have been chairman to the best, the nicest and most helpful of all boards.

I wish to thank the members for their cooperation and assistance and to express my thanks again for the honor and confidence bestowed upon me. My wish this year was to hold our auxiliary together and that my year would end in world peace. The first part of my wish was granted. Let's hope the latter will be to my successor, Mrs. John Dunn, to whom I offer my loyal support and sincere wishes for a very successful year, and hope she will enjoy as happy a one as I have had.

Respectfully submitted,

Mrs. Cassius L. Peacock,
President.

OUACHITA PARISH

Luncheon in the Blue Room of the Frances hotel brought members of the Woman's Auxiliary to the Ouachita Parish Medical society together for an interlude of conversation over the coffee cups and a program later featuring a review of "The Apostle" by Mrs. A. D. Tisdale.

Mrs. J. T. Gallaspy, Mrs. J. Q. Graves and Mrs. B. M. Meengs, served as hostesses on this occasion and presided over the luncheon table.

Mrs. P. L. Perot, president, introduced two new members, Mrs. J. E. McConnell and Mrs. F. J. Willey.

The following members were present: Mrs. J. E. McConnell, Mrs. J. Q. Graves, Mrs. F. P. Rizzo, Mrs. Ralph Talbot, Mrs. J. T. Gallaspy, Mrs. J. B. Vaughan, Mrs. A. B. Gregory, Mrs. H. V. Collins, Mrs. P. L. Perot, Mrs. A. D. Tisdale, Mrs. F. J. Willey, Mrs. A. G. McHenry, Mrs. R. V. McMichele, Mrs. S. W. Shelton, Mrs. M. B. Meengs, Mrs. W. L. Bendel.

Mrs. M. C. Wiginton,
Chairman, Press and Publicity.

BOOK REVIEWS

Microscopic Technique in Biology and Medicine: By E. V. Cowdry. Baltimore, The Williams and Wilkins Co., 1943. Pp. iv+206. Price, $4.00.

This volume is an extremely useful tool in any laboratory where microscopic work is done. Workers and investigators in biology and medicine who are interested in the minute structure of living things will find here definite information pertaining to problems concerned with the demonstration of microscopic structure. The book is replete with valuable hints, shortcuts, advice, and guides to yield best results with the simplest and most adequate method. The key feature of the book is the alphabetical arrangement, making its material readily accessible. Thus the reader may easily turn to the name of a structure (for example, mitochondria, negri bodies, skin), an element (iron, sodium, mercury), an enzyme, a dye or a particular technic in which he is interested. References are numerous and are entered in the appropriate places.

CHARLES MIDLO, M. D.

Synopsis of Tropical Medicine: By Sir Philip Manson-Bahr, C. M. G., D. S. O., M. D., F. R. C. P. Baltimore, The Williams and Wilkins Co., 1943. Pp. 224. Price, $2.50.

For even a specialist like Sir Philip Manson-Bahr to attempt a brief "vest pocket" synopsis of the diseases of warm climates requires more than ordinary courage. In some respects the volume is a success, in others a failure. In successive chapters the following subjects are presented:

I. Protozoal Diseases (malaria, leishmaniasis, African trypanosomiasis, Chagas' disease, amebiasis);

II. Spirochaetal Disease (relapsing fever, leptospirosis, seven-day fever, rat-bite fever, yaws, pinta);

III. Rickettsia Diseases (the typhus group, bartonellosis);

IV. Bacterial Diseases (plague, tularemia, melioidosis, undulant fevers, bacillary dysenteries, cholera, enteric fevers, enteric-like fevers, leprosy, etc.);

V. Virus diseases (yellow fever, Rift Valley

fever, dengue, phlebotomus fever, psittacosis, pock diseases, rabies, lymphogranuloma inguinale, encephalitis japonica, etc.);

VI. Fungous Diseases;
VII. Nutritional Diseases;
VIII. Climatic Diseases;
IX. Miscellaneous Group;
X. Vegetable Poisons;
XI. Animal Poisons;
XII-XV. Metazoal Diseases;
XVI. Laboratory Methods.

On the whole the outline is excellent and the terminology is good. It is difficult to understand why chiniofon is so underrated in the treatment of amebiasis (p. 36) and why diodoquin is entirely omitted. Similarly, in the treatment of hookworm disease (pp. 176-178), tetrachlorethylene is not mentioned. These failures to include well accepted procedures in both American and British medicine would appear to be based on prejudice rather than oversight.

The most serious criticism which the reviewer has of this "Synopsis" is that it skims a broad surface but fails to provide enough information about any particular subject to serve as a satisfactory guide for the clinician previously inexperienced in these particular diseases.

The volume is essentially free of typographical errors, but many of the pages are "smudged" so that they are not easily read. There are five plates in black and white, rather two darkly printed. A comprehensive index is provided.

ERNEST CARROLL FAUST, Ph. D.

A Manual of Medical Parasitology: By Clay G. Huff. Chicago, The University of Chicago Press, 1943. Pp. 88. $2.00.

This manual is the outgrowth of required work in medical parasitology at the University of Chicago and includes the following subjects: I. Trematodes or Flukes; II. Cestodes or Tapeworms; III. Nematodes or Roundworms; IV. Intestinal Protozoa; V. Hemoflagellates; VI. Malarial Parasites of man; VII. Mosquitoes Which Transmit Disease; VIII. Flies Which Transmit or Cause Disease; IX. Other Bloodsucking Insects Which Transmit Disease; X. Ticks and Mites—Order Acarina; XI. Laboratory Diagnosis of Parasitic Infections. There are eleven good zinc plates of figures and an excellent colored plate on malaria parasites. It is unfortunate that on page three an attempt has been made to combine the life cycles of two human flukes with essentially different modes of development, namely, the blood fluke and the Chinese liver fluke. Likewise, the figure on page 19 is of a nematode not parasitic in man but rather in the cockroach. Why could not a human nematode parasite have been used?

The essentials of etiology, geographical distribution, epidemiology, pathology and laboratory diagnosis are provided for each parasite, but symptomatology, treatment and prevention are omitted. This manual is apparently designed for the first- or second-year medical student, for whom the subject matter is excellent except failure to consider the control of parasites. The omission of the clincal aspects and the method of handling the subject matter are serious handicaps to the use of this little volume during the clinical years of medicine.

The manual is attractively printed, the type is clear and the quarto size is well adapted for laboratory use. There is a page of important reference books and a good author-subject index.

ERNEST CARROLL FAUST, Ph. D.

Internal Medicine in General Practice: By Robert Pratt McCombs. Philadelphia, W. B. Saunders Co., 1943. Illus. Pp. 694. Price $7.00.

McCombs has attempted the impossible. This volume on the practical aspects of internal medicine intended for the general practitioners and students was derived from the author's experience in postgraduate instruction. While it unquestionably is of excellent compilation and is of novel lecture type presentation it is certainly too incomplete for student consumption and probably too omissive for acceptable postgraduate reference. The conciseness is commendable and the summarization of each section is novel.

In emphasizing the fundamentals of diagnosis the author admirably denounces the impressive "snap diagnosis" and then expounds the virtue of diagnosis made without roentgen or laboratory studies. It is rather confusing to find one debating an issue alone; certainly the general practitioner and student need a better understanding of these diagnostic procedures and it is acceptable opinion that their ignorance of their applicability results in such advanced pathology reaching the urban physician from his country reference.

The reviewer is pleased to find consideration given to duodenitis, nutritional deficiencies, the exploitation of vitamins, the virtues of crude liver extract, the virus or atypical pneumonides, sulfamido toxicities and the diseases in which there is no indication for the sulfamido derivities. Even a brief note on penicillin is included. These indicate a completeness of thought in the preparation.

On the whole, however, the publication is one of "War Time" in which too many inadequacies have possibly been enforced. To note only a few pertinent lacks: one finds no menttion of cephalin-flocculation, no controversial statement on the poorly accepted Meulengracht regime and no mention of the digitalis glucosides.

I cannot endorse this volume as a commendable abstract to substitute for our acceptable texts nor is it an adequate supplement to the already published abstracts on the various specialties embodied in internal medicine. It is, however, a commendable war-time effort on Lieutenant Mc-

Comb's part and will possibly be the outstanding concise presentation on internal medicine for this period.

GORDON MCHARDY, M. D.

Fractures and Dislocations: By Edwin O. Geckler, M. D. Third edition, Baltimore, The Williams and Wilkins Co., 1943. Pp. 361. Price $4.50.

The author proposed in his preface to "condense the subject of fractures and dislocations without the omission of important details." This he accomplishes very well. The text is explicit enough without being verbose and unnecessarily lengthy. Prototypes of all varieties of fractures are described and satisfactory treatment outlined for each. Illustrations, which are so important in a work of this kind, are well chosen and unlike some other texts, seem to have been selected with more consideration for what information they may impart to the student than for what advertising value they may have for the author. Diagrams are frequently used and are most instructive. Undoubtedly the author may have chosen roentgenograms of personal cases to replace many of the sketches, but only, the reviewer feels, at a loss of some of the teaching value of the illustrations. This is an outstanding short book on fractures.

The reviewer would have been more pleased to find his name spelled correctly on page 337.

HOWARD MAHORNER, M. D.

Quarterly Review of Medicine: Vol. 1, No. 1 (November, 1943). 314 Randolph Place, N. E., Washington, D. C. $9.00 per year.

The need of clinical abstract journals in the specialties has been realized for some years. The appearance of quarterly journals of abstracts prepared by the workers of the Washington Institute of Medicine, from material available in the Army Medical Library, will therefore be welcomed.

The editorial staff of the Quarterly Review of Medicine is composed of leading physicians of the country. Sections of the Review are devoted to Acute Infectious Diseases, Diseases of the Cardiovascular System, Diseases of the Digestive System, Diseases of the Bones, Joints and Muscles, Metabolic Disorders, and a General Section of articles of broader interests. The first number includes 71 abstracts as well as an author and subject index to the issue.

Abstracts of only five articles from Spanish journals, one from a Portuguese journal and two from British journals are included in this first number. It is to be hoped that future issues will give a more extensive survey of foreign medical material.

The Quarterly Review of Medicine should fill a useful purpose in aiding the busy physician to keep abreast of progress in medical thought. Separate but similar publications cover the fields of Otorhinolaryngology, Obstetrics and Gynecology, and Surgery.

MARY LOUISE MARSHALL.

Backache and Sciatic Neuritis: By Philip Lewin, M. D. Philadelphia, Lea and Febiger, 1943. Pp. 745. 235. Illus. Price $10.00.

This book is an encyclopedia of knowledge pertaining to the back. It is no mere handbook, and there are no new or startling facts presented in it. Dr. Lewin has brought together a tremendous amount of information with direct or indirect bearing on the general broad scope of the subject. There is a most comprehensive bibliography of over 800 references.

Much of the material is too elementary to be of real value, and many of the 745 pages deal with such indirectly correlated subjects as the technic of giving parenteral fluids. On the other hand, it answers a most urgent need for a text covering the details of an orthopedic examination of the back. The medico-legal importance of good records, a discussion of the technics in various types of physiotherapy, and some correlation of neurological, medical, psychiatric and orthopedic aspects of the problem are all included.

Many rare and unusual considerations pertaining to backache and sciatic neuritis are mentioned. Every imaginable disease seems to be discussed.

The reviewer recommends the book as a valuable storehouse of information, not as a brilliant contribution to the progress of orthopedics.

DONALD T. IMRIE, M. D.

Therapy of the Neuroses and Psychoses: By Samuel Henry Kraines, M. D. 2d ed. rev. Philadelphia, Lea and Febiger, 1943. Pp. 567. Price, $5.50.

In the reviewer's opinion, this splendid book accomplishes just what it starts out to do—to be a better one than the last edition. It deserves even more pdaise than the reviewer gave the first edition.

In this new edition the chapter, on Psychoanalysis and Related Schools, has been deleted to provide space for new material. The text has been expanded to include new chapters on The Psychoses, Shock Therapies, Psychiatric Interview Technics and Neurophychiatry Incident to War. There is an excellent, timely and most informative section on Neuropsychiatric States Induced by War which includes a detailed discussion of social psychiatry, selective service problems, psychiatric

states in training centers and "nervous breakdowns" in combat.

This is far and away the best work of its kind for both the student and practitioner. Dr. Kraines is one of the most stimulating, original, and profound psychiatric experts, and surely the most lucid, writing in English today.

C. P. MAY, M. D.

Elements of Medical Mycology: By Jacob H. Swartz. New York, Grune and Stratton, 1943. Pp. 179. Price, $4.50.

The introducttion to this little volume is written by Dr. Fred D. Weidman, the dean of American pathologists, especially interested in dermatological conditions, who also read the manuscript. This should be a guarantee of the soundness of the work presented. In the preface it is made clear that the work is intended as a guide for practitioners and not as a complete presentation of either the mythological or the clinical aspects of the subjects.

There are nine chapters. Chapter I is a general discussion of the subject, including a classification of the pathogenic fungi; Chapter II, the diagnosis of fungus infections, in which special stress is laid on the laboratory features; Chapter III covers the blastomycetes; Chapter IV, the genus Microsporum; Chapter V, the genus Trichophyton; Chapter VI, other pathogenic fungi; Chapter VII, common contaminants and probable pathogens. Chapter VIII is devoted to immune reactions. Those interested in immunity will note with approval the conservative attitude on skin tests as applied to the field of mycology. Chapter IX is devoted to sulfanilamide and its derivatives in mycological conditions.

The various subjects are covered by a discussion of the mycological aspects followed by the clinical, the latter including a brief but adequate section on treatment. There are well chosen references at the end of most of the chapters. Original illustrations are numerous, so numerous, indeed, that on page 145 it has been necessary to insert a photograph, illustrating Tinea Versicolor, in the text dealing with the disease known as mycetoma.

At the end of the book will be found a folding chart, summarizing mycological and clinical data, however, omitting treatment.

To one interested in the preventive aspects of medicine it is pleasing to find two pages devoted to prophylaxis against members of the genus Trichophyton. The instructions for the prevention of infection are detailed, but not likely to be adhered to closely. In this section the statement is made that the value of the antiseptic foot bath has not been established. In the same section, under swimming pool sanitation, personal bathing shoes, worn going to and coming from the pool, are regarded as important.

This little volume should prove of value to anyone called on to deal with clinical conditions due to microorganisms of the group considered, general practitioners as well as those specializing in dermatology, although the discussions are hardly so extensive as the latter might consider desirable.

G. M. MCCOY, M. D.

The Hospital in Modern Society: By Arthur C. Bachmeyer, M. D., and Gerhard Hartman, Ph. D. New York, The Commonwealth Fund, 1943. Pp. 768. Price $5.00.

This is a compilation of articles from the periodical literature in the hospital field, and in such allied fields as medicine, public health, management, and law, concerning the essence of hospital administration. The articles have been well selected and cover nearly all aspects of hospital administration. Conflicting opinions are given in the various articles which serve the useful purpose of stimulating thought and analysis. The bibliographic references are complete up to July 1943, but no articles subsequent to 1940 have been reproduced.

The book will be valuable for any one interested or concerned with hospital administration or hospital management. In this rapidly growing and challenging field this book serves a very useful purpose.

R. L. PULLEN, M. D.

A Textbook of Medicine: By American authors; Edited by R. L. Cecil, A. B., M. D., Sc. D., 6th Ed. Philadelphia, W. B. Saunders Co. 1943. Pp. 1566. Price $9.50.

The sixth edition of Cecil's Medicine, well known to so many medical students, has now made its appearance. Extensive changes in text and reference lists have been made adding greatly to its value. New articles on diseases not previously covered have been contributed by well known authors. Thus a chapter on aviation medicine by Barach has been added to new chapters on Hirudinea, Contact Dermatitis, Air Sickness and Shock. A feature which is particularly appealing is a list by R. G. Stillman, of normal values for the commoner laboratory tests. With the great multiplicity of tests it becomes more and more difficult to keep normal values in mind.

One wonders how the publishers can produce

such a book for the price in these difficult days. The book can be wholeheartedly recommended.

V. DERBES, M. D.

PUBLICATIONS RECEIVED

American Medical Association, Chicago: Handbook of Nutrition, A Symposium, Prepared Under the Auspices of the Council of Foods and Nutrition of the American Medical Association, 1943.

J. B. Lippincott Company, Philadelphia: A Surgeon's World, by Max Thorek, M. D.

W. B. Saunders Company, Philadelphia and London: Gastro-enterology (in three volumes), Volume II, by Henry L. Bockus, M. D. Traumatic Injuries of Facial Bones, by John B. Erich, M. S., D. D. S., M. D. and Louie T. Austin, D. D. S., F. A. C. D. Minor Surgery, by Frederick Christopher, S. B., M. D., F. A. C. S.

Paul B. Hoeber, Inc., New York and London: Clinical Tropical Medicine, by twenty-seven authors, edited by Z. Taylor Bercovitz, M. D., Ph. D., F. A. C. P.